

# **AUTOMOTIVE INDUSTRIES**

Published Semi-Monthly

## **INDEX**

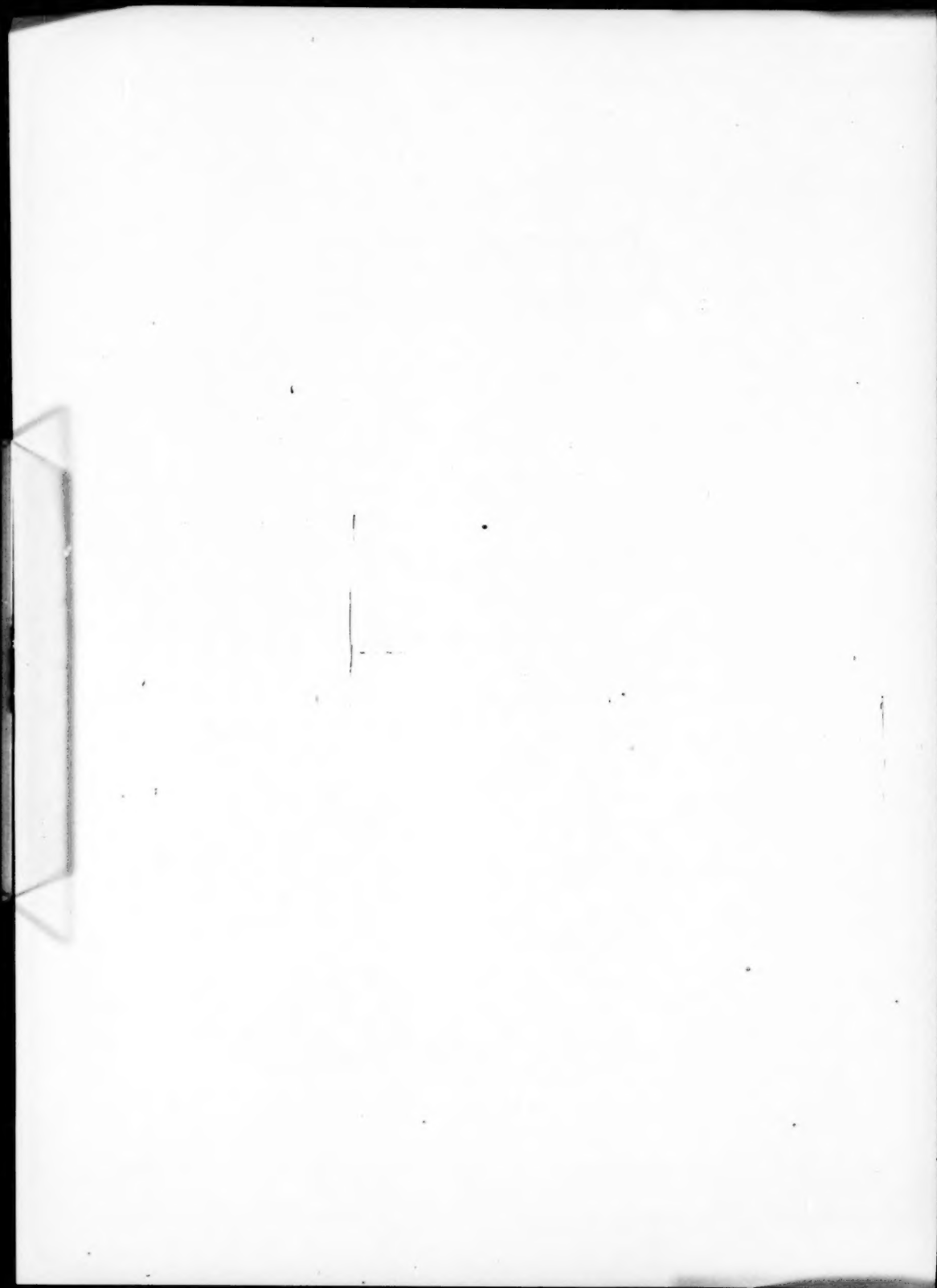
### **Volume 104**

**January 1 to June 15**

### **1951**



**Chilton Company, Inc.**  
**Philadelphia 39, Pa.**  
**PRICE 50¢**



# AUTOMOTIVE INDUSTRIES

## EDITORIAL INDEX TO VOLUME 104

Issues January 1 to June 15, 1951, Inclusive

### A Issue Page

#### Abstracts

Advanced production developments .....	2-1	32
Flight characteristics of the Boeing B-47 Stratojet .....	5-15	105
Flight experience with turbine propeller powered aircraft .....	5-15	106
German aircraft manufacturing methods .....	2-1	36
High energy multiple spark ignition systems for jets .....	2-1	35
Ignition problems in damp weather .....	2-1	92
Lashoraph—instrument for oblique valve lash in a running engine .....	4-1	51
Materials of military motorized equipment .....	4-1	50
Military tactical wheeled vehicle body requirements .....	4-1	50
Minimum energy loss in ignition systems .....	2-1	92
Motor fuel volatility trends .....	2-1	91
Operational stresses in automobile parts .....	2-1	34
Passenger helicopter by Los Angeles Airways .....	5-15	108
People, piston rings, and quality control .....	6-15	126
Quality control eliminates unnecessary operation .....	6-15	122
Quality control in parts manufacturing .....	6-15	124
Role of gasoline in engine development .....	2-1	86
Series 2 oils pay their way in Diesels .....	2-1	92
Starters for turbojet engines .....	2-1	35
Strain-gage method of determining the running lash of L-head and overhead-valve engines .....	4-1	92
Stresses imposed by processing Surging in centrifugal and axial-flow compressors .....	5-15	105
Tractor use of liquefied petroleum gas .....	2-1	36
Turbosuperchargers in commercial aviation .....	5-15	39

#### Aircraft Design—See Design

#### Aircraft Engines—See Engines

#### Aircraft Parts—See New Developments & New Products

#### Aircraft Production—See Production Methods

#### Associations and Organizations

##### See also Government Agencies

ASTE stress production know-how at annual meeting .....	4-15	36
ASTE's new officers and directors .....	4-15	36
BAE's study of fiber consumption in textiles used for passenger car interiors .....	3-1	35
NACA's investigation of spontaneous freezing temperatures .....	2-15	128
Quality Control Convention emphasizes military requirements .....	6-15	52
SAE Annual Aeronautics Meeting .....	5-15	39
SAE meeting—Impact of rearmament program .....	2-1	32
SAE meeting presents military vehicle problems .....	4-1	50

#### Aviation

Aircraft and aircraft engine production .....	3-15	119
Aircraft handling costs cut by double duty technique (Northrop) .....	5-1	44
Aircraft industry must outdo World War II achievements .....	1-15	38

#### Aviation (Continued)

Aircraft propellers and other products. Aircraft propeller plants. Value of shipments: 1950 & 1949 .....	3-15	172
Air Force developing multifuel lightweight Diesel engine .....	6-15	32
Air Force needs fast fire trucks .....	6-1	38
Argentina to develop own aircraft industry .....	6-1	51
Canberra twin-jet bomber to be built by three nations .....	4-1	44
Civil aircraft registrations .....	3-15	121
Civil aircraft shipments, by month, 1950-1949 .....	3-15	120
Convair-Liner 340, new transport .....	4-1	53
Development of steel shapes for aircraft components .....	3-15	204
Employment in complete aircraft and aircraft engine plants .....	3-15	120
Engineering developments in aircraft production .....	5-15	34
Extruded hollow propeller blades .....	4-1	32
Flight characteristics of the Boeing B-47 Stratojet (abstract) .....	5-15	105
Flight experience with turbine propeller powered aircraft (abstract) .....	5-15	106
Forged-tapered wing spars reduce plane weight .....	5-1	80
Four-engine civil aircraft registrations .....	3-15	121
GM to convert Kansas City plant to jet fighter production .....	1-15	35
German aircraft manufacturing methods (abstract) .....	2-1	36
Hiller-Hornet, new helicopter powered by twin ram jet engines .....	3-1	36
How aircraft design changes can be controlled (Douglas) .....	1-1	35
Investigation of spontaneous freezing temperatures .....	2-15	128
McCulloch tandem-rotor MC-4 helicopter .....	4-15	48
Newest methods of fabricating honeycomb aircraft components (Northrop) .....	6-15	42
1950 personnel and executive aircraft shipments .....	3-15	175
Number of employees in aircraft propeller plants: 1949-1950 .....	3-15	173
Optical airframe tooling: a new assembly technique .....	4-15	38
Passenger helicopter by Los Angeles Airways .....	5-15	108
Personal and transport aircraft shipments, 1950-1949 .....	3-15	120
Registered civil aircraft by engine classifications .....	3-15	121
Registered civil aircraft by leading states .....	3-15	120
Registered civil aircraft by manufacturer .....	3-15	120
Shipments of civil aircraft engines and other products of their plants, 1950-1949 .....	3-15	119
Shipments of complete civil aircraft and other products of their plants, 1950-1949 .....	3-15	119
Single-engine civil aircraft registrations .....	3-15	121
Surging in centrifugal and axial-flow compressors (abstract) .....	5-15	105
Three-engine civil aircraft registrations .....	3-15	121
Turbosuperchargers in commercial aviation (abstract) .....	5-15	39
Two-engine civil aircraft registrations .....	3-15	121
U. S. and British civil aircraft specifications .....	3-15	152
U. S. and British military aircraft specifications .....	3-15	150
U. S. exports of aeronautics products .....	3-15	122
U. S. exports of aeronautics products, by years, 1912-1950 .....	3-15	122
U. S. rotary wing aircraft specifications .....	3-15	153

#### Axles—See also New Products and New Developments

Advanced production methods in self-contained axle plant (Salisbury Axle Works) .....	6-15	38
Rear axle designed for short wheelbase truck tractors (Timken-Detroit) .....	2-1	41

#### Issue Page

#### B

Hearings—See New Products and New Developments	
Buses—See also Engines	
Average bus miles operated and number of revenue passengers carried .....	3-15 149
Average size of class 1 intercity bus company .....	3-15 148
City and intercity bus specifications .....	3-15 142
Intercity passenger-miles traveled, by mode of transportation .....	3-15 149
Motor bus factory sales—by type of bus .....	3-15 86
Number and value of buses owned .....	3-15 14
Revenue motor bus factory sales .....	3-15 1
Transit bus data—number in use and deliveries .....	3-15 151

#### Business Conditions—See also

##### Production, Automotive & Aviation

Aircraft industry must outdo World War II achievements .....	1-15 38
Business Pulse, The (Guaranty Trust Co.) .....	4-15 50
Business Pulse, The (Guaranty Trust Co.) .....	5-15 54
Business Pulse, The (Guaranty Trust Co.) .....	6-15 54
Defense again the No. 1 job .....	4-15 34
Defense contract awards .....	3-15 180
Impact of rearmament program discussed at SAE meeting .....	2-1 32
Industrial production indexes .....	3-15 78
Metals—analysis of market .....	4-1 43
Metals—analysis of market .....	5-1 55
Metals—analysis of market .....	6-1 49
Metals shortages create many production problems .....	4-15 46
Tractor demand to continue heavy in '51 .....	1-15 42
What's ahead for the automobile industry .....	1-15 32

#### C

#### Canadian Trade

Canadian motor vehicle production—by months .....	3-15 89
Motor vehicle production in Canada .....	3-15 89
1949 Canadian motor vehicle registrations—by Provinces .....	3-15 89

#### Carburetors—See New Products & New Developments

#### Car Descriptions

Automotive activities in Italy .....	5-15 32
Italy's Automobile Show .....	5-15 32
British passenger car specifications .....	3-15 154
Buick's new bodies on 1951 models .....	1-15 46
Chrysler's 1951 model offers V-8 engine, power steering and torque converter .....	2-1 43
De Soto's 1951 model features longer, more powerful engine .....	2-1 44
Foreign car specifications .....	3-15 155
Czech, Fr., Gr., It. .....	1-1 37
Hotchkiss announces all light-alloy car .....	3-1 41
Nash Healey sports car .....	2-15 41
1951 Indianapolis Race previews .....	3-1 32
1951 International Auto Salon .....	4-15 42
1951 passenger car specifications .....	3-15 125
Oldsmobile Super 88 features new body and leaf-type rear suspension .....	4-1 49
Plymouth's '51 cars styling and mechanical improvements .....	1-15 41
Renault's new Frigate model in production .....	5-1 57
Russian, and her satellites, motor vehicles .....	4-15 32
Simca of France starts production on new Aronde model .....	6-15 46
West Germany hold largest International Automobile Show .....	5-15 40

#### Cleaners—See also New Products & New Developments

New cleaning method eliminates broken castings at General Foundries .....	3-15 224
---	----------

#### Clutches

Automatic clutch control introduced in France .....	4-1 50
---	--------

# **AUTOMOTIVE INDUSTRIES—INDEX**

January 1 to June 15, 1951

Communication		Issue Page	Engines		Issue Page	Finishes		Issue Page
Communication system operates on FM carrier current (Farmers En.)		1-1 102	Air Force developing multifuel lightweight Diesel		6-15 32	Hot lacquer spraying problems solved		1-15 48
<b>Connecting Rods—See New Products &amp; New Developments</b>			Aluminum cylinders without cast iron liners		2-15 32	<b>Foreign Plants</b>		
<b>Construction—See Plants Changes new and expansion</b>			Annual National (41st) Motor Boat Show outdoes previous exhibits		2-1 37	Assembling large chassis in modern British plant (Leyland Motors)		3-1 42
<b>Contracts</b>			Automotive activities in Italy—Italy's Automobile Show		5-15 32	Improved handling methods in new GM Vauxhall plant		5-1 38
Engineering analysis of 1951 Mobilgas Economy Run		4-15 44	Automotive Diesel engine specifications		3-15 166	<b>Foreign Business Activities—See also Exports &amp; Imports</b>		
Mobilgas Economy Run in 1951 has longer course		2-15 56	Automotive gasoline engine specifications		3-15 156	Argentina to develop own aircraft industry		6-1 51
1951 Indianapolis Race previews The Fastest "500"—Indianapolis Race results		5-1 32	Caterpillar's two new Diesels, D357 & D326, design details		4-1 44	Automotive activities in Italy—Italy's Automobile Show		5-15 32
<b>Cranks</b>		6-15 34	Chrysler's V-8 engine; pistons, rods and crankshafts in production—Part II		6-1 40	Motor vehicles of Russia and her satellites		4-15 32
<b>Contracts</b>			Chrysler's V-8 engine; machining operations—Part I		2-1 38	1951 International Auto Salon		4-15 42
Defense contract awards		3-15 180	Controlled atmosphere enclosure for assembly of Reo engines		3-1 30	Renault's new Frigate model in production		5-1 57
What's ahead for the automobile industry: military contracts		1-15 32	Diesel engines for use in Diesel electric locomotives specifications		5-15 46	Simca of France starts production on new Aronde model		6-15 46
<b>Conventions—See Meetings</b>			French Talbot 6-cyl rate engine (drawing)		6-1 32	West Germany holds largest International Automobile Show		5-15 40
<b>Copper Industry—See Metals</b>			GM's 19XX MC engine		3-15 170	<b>Fuels</b>		
<b>Crankshafts—See New Products, Automotive Parts</b>			Hiller-Hornet, new helicopter powered by twin ram jet engines		2-1 49	Estimated proved reserves of crude oil in the U. S. A.		3-15 146
<b>D</b>			LPG conversion system for Reo Gold Comet engine		6-1 46	Estimated proved reserves of natural gas liquids in the U. S. A.		3-15 147
<b>Dealers—See Marketing</b>			McCulloch tandem-rotor MC-4 helicopter		3-1 36	LPG conversion system for Reo Gold Comet engine		5-15 45
<b>Descriptions—See Car, Truck, Airplane, Engine and New Products Descriptions</b>			Passenger car engine trends		4-15 48	Motor fuel volatility trends (abstract)		2-1 91
<b>Design</b>			Progress in engine design		3-15 124	New process for production of tetraethyl lead		6-1 52
Buick's new bodies on 1951 models		1-15 45	Shipments of civil aircraft engines and other products of their plants, 1950-1949		3-15 119	Propane as an engine fuel; the Economics of		2-15 42
Cabrera twin-jet bomber to be built by three nations		4-1 44	Surging in centrifugal and axial-flow compressors (abstract)		5-15 105	Role of gasoline in engine development (abstract)		2-1 86
Convair-Liner 340, new transport		4-1 53	Turbochargers in commercial aviation (abstract)		5-15 39	Series 2 oils pay their way in Diesels (abstracts)		2-1 92
Designing planetary gears for automatic transmissions		3-1 26	U. S. aircraft engine specifications		3-15 174	Tractor use of liquefied petroleum gas (abstract)		2-1 36
Diesel electric drive for the Tournaton		3-15 220	U. S. and British aircraft gas turbine specifications		3-15 172	<b>Fuel Systems</b>		
How aircraft design changes can be controlled (Douglas)		1-1 38	U. S. outboard motor specifications		3-15 178	Production development of a jettable fuel tank		1-15 44
McCulloch tandem-rotor MC-4 helicopter		4-15 48	U. S. small gasoline engine specifications		3-15 176	Throttle return check on Powerglide carburetors		3-1 40
Military tactical wheeled vehicle body requirements (abstract)		4-1 50	West Germany holds largest International Automobile Show		5-15 40	<b>Gages—See New Developments &amp; New Products</b>		
Oldsmobile Super 88 features new body and leaf-type rear suspension		4-1 49	White's Mustang Model 250A engine develops 150 hp		4-1 37	<b>Gasoline—See Fuels</b>		
Passenger car engine trends		3-15 124	<b>Exhibits—See Shows</b>			<b>Gears—See also Transmissions, Axles &amp; New Products</b>		
Plymouth's '51 styling and mechanical improvements		1-15 41	<b>Exports &amp; Imports, Tariffs</b>			Designing planetary gears for automatic transmissions		3-1 26
Progress in engine design		3-15 124	New cars and trucks are 50% of total automotive exports		3-15 118	Gears of exceptional quality...		5-15 42
Simplified body design reduces soldering joints		6-1 48	U. S. exports of aeronautic products		3-15 122	Torsional vibrations minimized in reverse and reduction		4-1 48
<b>Diesel Engines—See Engines</b>			U. S. exports of aeronautic products, by years, 1912-1950		3-15 122	Two new gear materials (Int'l Nickel)		1-1 42
<b>Distribution—See Marketing</b>			U. S. exports of automotive products, 1947-1950		3-15 117	<b>Government Agencies &amp; Activities</b>		
<b>Drills—See New Products, Machine Tools &amp; New Developments</b>			U. S. exports of new motor vehicles, 1920-1950		3-15 116	Defense contract awards		3-15 180
<b>Drives—See Transmissions</b>			U. S. exports of new trucks and chassis by G.V.W.		3-15 117	Defense facilities approved for fast tax writeoffs		5-15 94
<b>E</b>			U. S. exports of tires and inner tubes		3-15 117	Seven initial orders to be issued for CMP		5-1 92
<b>Earnings—See Financial News</b>			U. S. imports of new passenger cars		3-15 118	<b>Grinders—See New Products &amp; New Developments</b>		
<b>Electrical Equipment—See also New Products &amp; New Developments</b>			U. S. motorcycle imports		3-15 118	<b>H</b>		
Convertolet testing of generator regulators		5-1 40	U. S. imports for consumption, 1939-1950		3-15 118	<b>Heating &amp; Ventilating Systems</b>		
Swaged generator pole shoes conserve copper wire (Deleg-Remy)		1-1 40	<b>F</b>			Latest developments in vehicle heating (Stewart-Warner)		1-15 36
<b>Employment</b>			<b>Fabrics</b>			<b>Heat Treatment—See Metallurgy &amp; Production Methods</b>		
Employment by sex—production workers		3-15 79	Fiber consumption in textiles used for passenger car interiors		3-1 35	<b>Highways</b>		
Employment in complete aircraft and aircraft engine plants		3-15 120	<b>Farm Income—See business Conditions</b>			More turnpikes to handle modern traffic		6-1 34
Number of employees in aircraft propeller plants: 1949-1950		3-15 173	<b>Financial News—See also Company Listings</b>			<b>I</b>		
			Business Pulse, The (Guaranty Trust Co.)		4-15 50	<b>Ignition Systems—See also New Products, Automotive Parts</b>		
			Business Pulse, The (Guaranty Trust Co.)		5-15 54	High energy multiple spark ignition systems for jets (abstracts)		2-1 35
			Business Pulse, The (Guaranty Trust Co.)		6-15 54	High frequency ignition needs no breaker points (GE)		1-1 34
			Defense facilities approved for fast tax writeoffs		5-15 94			

Ignition Systems (Continued)		Mergers—See Corporations, New & Changes		Production and Plant Equipment (Continued)	
Ignition problems in damp weather (abstract).....	2-1 92	<b>Metals—See also Metallurgy</b>		Contour grinding machine—Visual-Grind (Cleveland Grinding).....	2-15 58
Low tension ignition system development by Smitovsk of Holland.....	3-1 47	Development of steel shapes for aircraft components....		Contour machine, with 36 in. stroke work table—Contourmatic (DoALL).....	6-15 62
Minimum energy loss in ignition systems (abstract).....	2-1 92	How shortages of aluminum may affect passenger cars....		Contour projector—Model 8 (Eastman).....	4-15 88
<b>Illumination—See Production Methods, Highways</b>		Metal analysis of market....		Contour sawing diamond tooth band (DoALL).....	6-15 72
<b>Imports—See Exports &amp; Imports</b>		Metal analysis of market....		Control system, remote, hydraulic (Supedraulic).....	6-15 78
<b>Industrial Relations—See Employment, Management, Labor Relations</b>		Metal shortages create many production problems.....		Conveyor, for machine tool chips—the Chip-Tote (May-Fran).....	5-1 48
<b>Inspection—See also Production Methods</b>		Two new gear materials (International Nickel).....		Conveyor lubricator, automatic, 12-point (Fauver).....	4-15 62
Two new inspection devices used at Ford's.....	3-1 44	<b>Metalurgy</b>		Core grinders, dual-type—Series 71 (Milwaukee Foundry Sps. Inc.).....	1-15 78
<b>Instruments—See New Products &amp; New Developments</b>		Boron treated steels prove efficient in use.....		Countersinking and deburring machine (Black Drill).....	3-1 48
<b>J</b>		Changing properties of metals by bombarding with electrons (North America).....		Crank and boom, hydraulic (Austin-Western).....	5-1 52
<b>Junking</b>		How tool life is affected by heat resisting alloys.....		Crank pin grinding machine—Type DH (Landis Tool).....	3-1 48
Estimated scrapage of motor vehicles.....	3-15 96	Improved finishing machine for zinc base die castings, the Gyro-finisher.....		Cutting machine, wet abrasive Model 508 (American Chain).....	3-15 238
<b>L</b>		Machining and hardening in the same setup.....		Cutting machine, wet abrasive type (American Chain).....	4-1 55
<b>Lacquers—See Finishes</b>		Operational stresses in automobile parts (abstract).....		Cylinder head drilling machine (Cross).....	5-15 51
<b>Lathes—See New Products &amp; New Developments</b>		Stresses imposed by processing (abstract).....		Diamond tooth band, for contour sawing (DoALL).....	6-15 72
<b>Lead Industry—See Metals</b>		Two new gear materials (Int'l Nickel).....		Dispatch carrier, automatic (American MonoRail).....	5-1 52
<b>Lights, Vehicle—See New Products &amp; New Developments</b>		<b>Military Equipment &amp; Activities</b>		Dock leveling ramp—hydraulic "level-leveling" (Globe Heavy).....	5-1 49
<b>Litigation</b>		Air Force developing multifuel lightweight Diesel engine....		Draw collet chuck Davos (Stallion).....	5-15 76
Automatic transmission patent suits to go to trial.....	1-1 47	Army fighting in Korea with World War II vehicles.....		Driller and countersinker, automatic (Gove-Nelson).....	1-15 58
<b>M</b>		Defense again the No. 1 job....		Drilling and tapping machine, 6-spindle—Burgmaster No. 2, Model A (Burg Tool).....	4-15 70
<b>Machine Tools—See also New Products &amp; New Developments</b>		Dodge brings out improved military vehicles.....		Drilling machine for cylinder heads (Cross).....	5-15 51
Huge hydraulic presses needed for making large aircraft parts.....	1-1 50	How Cadillac is equipping plant to build Walker Bull-Dog tanks.....		Drop hammer—Model "C".....	4-15 60
Machine tool bottleneck.....	5-1 60	IHC's two new military trucks, the M-41 and M-51.....		Ceco-Drop (Chambersburg).....	4-15 60
<b>Maintenance Factory—See Production Methods</b>		Materials of military motorized equipment.....		Drum cleaning machines, abrasive—Rotoblast—Models ES-400 and ES-382 (Fangborn).....	5-1 60
<b>Marketing—See also Used Cars, Exports &amp; Imports</b>		Military tactical wheeled vehicle body requirements (abstract).....		Electronic brain, low cost—"Ida" (Computer Corp.).....	6-15 70
Automotive wholesale and retail outlets, by states.....	3-15 93	USAF decentralizes supply setup.....		Furnace, controlled atmosphere (Ipsen Industries).....	4-1 56
Automotive wholesalers, dealers and repair shops, by years.....	3-15 93	What makes the Reo Eager Beaver waterproof.....		Gage for classifying critical tolerances—Selectronic (Pratt & Whitney).....	1-15 56
Monthly sales of replacement parts and accessories in the U. S., 1944-1950.....	3-15 88	<b>Motor Boats—See also Engines</b>		Gear hardening machine, radio-frequency—"Inductall" (Westinghouse).....	1-1 52
Wholesale value of repair parts and accessories, sales 1934-1950.....	3-15 88	Annual National (41st) Motor Boat Show outdoors previous exhibits.....		Gear loading device, semi-automatic (National Branch).....	5-15 50
<b>Materials Handling</b>		<b>N</b>		Gear unloading attachment, automatic (Michigan Tool).....	3-1 48
Aircraft handling costs cut by double duty technique (Northrop).....	5-1 44	<b>NEW DEVELOPMENTS</b>		Grinder, double vertical spindle, for coil springs—No. 928-30/60 (Besley).....	3-15 238
Conveyors testing of generator regulators.....	5-1 40	<b>Production and Plant Equipment</b>		Grinder for Diesel crankshafts—20-ton (Lempe).....	2-1 60
Designing to expedite handling of body units (Fisher).....	5-1 47	Accessory table for machine tools (DoALL).....		Grinder, hydraulic, universal—1024 (Rivett).....	2-15 58
Efficient materials handling vital to automotive production.....	5-1 34	Aircraft skin Hypro-milling machine—type 100 (Giddings & Lewis).....		Grinder, rotary table surface type, No. 16A3 (Blanchard).....	1-15 58
Ford's foundry mechanization improved handling methods in new GM Vauxhall plant.....	5-1 38	Angle guide blocks for band saw (DoALL).....		Grinder (surface) five head—No. 100C (Mattison).....	5-1 62
<b>Mechanical Handling—See Production Methods, New Products &amp; New Developments</b>		Automatic transmission case, special machine (Cross).....		Grinder, surface, rotary type (Hanchett) No. 24A (Mattison).....	1-15 56
<b>Meetings</b>		Band saw angle guide blocks (DoALL).....		Grinder, universal thread—worm type—Reishauer Type NKK (Cosa).....	3-15 246
ASTE stress production knowledge at annual meeting.....	4-15 36	Band saw machine, HP-36 Hydro-Feed (DoALL).....		Grinder, universal—Type CHW (Landis).....	5-1 62
Impact of rearmament program discussed at SAE meeting.....	2-1 32	Boring, drilling and milling machine—single-spindle, horizontal (Giddings & Lewis).....		Grinding machine, contour—Visual-Grind (Cleveland Grinding).....	2-15 58
Machine tool bottleneck.....	5-1 60	Boring, milling, and drilling machine, 4-way bed (Bullard).....		Grinding machine, double disk—Model 2V-18 (Gardner).....	2-15 72
Quality Control convention emphasizes military requirements.....	6-15 52	Cam shaft bushing assembly press, 15-ton (Oliger).....		Grinding machine, hydraulic, for pistons—Type H (Landis).....	2-15 66
SAE Annual Aeronautic meeting.....	5-15 39	Chip conveyor for machine tools—the Chip-Tote (May-Fran).....		Grinding unit, automotive piston (Norton).....	2-15 60
SAE meeting presents military vehicle problems.....	4-1 50	Chucking lathe, right angle—60-in. (Lodge & Shipley).....		Hoists, electric—Frame H Wright Speedway (American Chain).....	3-15 252
<b>Merchandising—See Marketing</b>		Clutch plate assembly machine (Klass Machine & Mfg.).....		Hydraulic-feed band saw machine, HP-36 Hydro-Feed (DoALL).....	1-15 58
		Combination planer and miller machine (Giddings & Lewis).....		Hydraulic grinder, universal—1024 (Rivett).....	2-15 58
		Computer, Integro-Differential Analyzer ("Ida") (Computer Corp.).....		Hydraulic piston grinding machine—Type H (Landis).....	2-15 66
		Connecting rod balancing machine (Snyder).....			
		Connecting rod weight balance milling machine (Motch & Merryweather).....			

Production and Plant Equipment		Issue Page		Production and Plant Equipment		Issue Page		New Products (Continued)		Issue Page	
(Continued)				(Continued)							
Hydraulic press, for auto parts (Hydraulic Press) .....	4-1	58		Rotary table surface grinder—vertical spindle, No. 16A3 (Blanchard) .....	1-15	58		Die and clamping head, automatic (Paul Mach.) .....	4-1	64	
Industrial oven heater panels (Jensen) .....	2-1	58		Shears for metal squaring (Wysong & Miles) .....	3-1	49		Die grinder, pneumatic, midge size (Mail Tool) .....	6-15	146	
Impregnating equipment for porous parts (Tischer) .....	2-1	60		Sheet separator, mangle type (Verson Allsteel) .....	2-15	70		Die handling unloader accessory (Towmotor) .....	5-15	84	
Jig borer measuring system—on No. 4E jig borer—"Electrolimit" (Pratt & Whitney) .....	2-1	58		Squaring shears—20 ft. long, 1/2-in. (Cincinnati Shaper) .....	4-1	56		Diesel engine, 135 hp, six-cyl—Model 135-D-2 (Waukesha) .....	2-1	62	
Lapping machine, attachments for—roller bar, and pneumatic lifts (Crane Packing) .....	3-15	248		Surface grinder, four spindle—No. 72 (Mattison) .....	6-1	54		Die sinking cutters, ball nosed taper (Pratt & Whitney) .....	1-15	85	
Lathe, chucking, right angle, 60-in. (Lodge & Shipley) .....	1-1	62		Tonnage indicator for forging press (National Mach.) .....	5-15	51		Die tongs, magnesium (Magline) .....	5-15	80	
Lubricator, for conveyor, automatic, 12-point (Fauver) .....	4-15	62		Transfer machine, five-station (Snyder) .....	4-1	56		Differential, power-dividing type—Dualoc Drive (Dualoc) .....	3-1	52	
Machine, abrasive drum cleaning—Rotoblast Models ES-400 and ES-382 (Pangborn) .....	5-1	60		Transmission case finishing machine (Cross) .....	1-1	54		Differential pressure cell, SR-4 Type FMB (Baldwin-Lima-Hamilton) .....	4-1	62	
Machine for balance milling connecting rods (Snyder) .....	1-1	54		Transmission case special machine (Cross) .....	3-15	250		Die sprocket hubs, interchangeable—Grip-Master (Cullman Wheel) .....	1-15	85	
Machine for finishing automatic transmission cases (Cross) .....	1-1	54		Turret lathe, precision—9-in. swing (Rivett) .....	6-1	64		Doorboards, magnesium (Magline) .....	5-15	80	
Machine, for gear hardening—radio-frequency—"Industrial" (Westinghouse) .....	1-1	52		Vertical mill attachment (Marvin) .....	2-1	96		Dolly racks, high-stack, cast-iron (Equipment Mfg.) .....	2-15	86	
Machine, special, for clutch housings (Cross) .....	5-1	60		Welding machine, mash type—PMM-2TL (Sciaky) .....	2-15	68		Door fastener, drop-forged, for trucks and trailers—Models No. 2300 and 2350 (W. H. Miner) .....	3-1	53	
Machine, special, for cylinder blocks (Cross) .....	4-1	55		Welding work positioner—Model 14BT500 (Aronson) .....	2-15	68		Drill chuck, self-centering—Gronkvist (Eric S. Johnson) .....	3-1	50	
Machine tool accessory table (DoALL) .....	6-1	56		Wet abrasive cutting machine—Model 270 (American Chain) .....	4-1	55		Drums, with "necked-in" top (Shell Oil) .....	5-1	66	
Magnetic sheet separator (Verson Allsteel) .....	2-15	70		<b>New Products</b>				Electrode, for resistance welding—"Nu-Wrinkle Cap" (Mallory) .....	6-15	94	
Metal squaring shears (Wysong & Miles) .....	3-1	49		Abrasive belt contact wheel—"61" (Carborundum) .....	5-15	62		Electrode, non-consumable, of thoriated tungsten—Thor-Tung (Air Reduction) .....	1-15	100	
Millers, tracer controlled, Keller type BC-22, having phenolic bearing surfaces (Pratt & Whitney) .....	6-1	58		Abrasive stones, color coded (Elgin) .....	1-1	58		Electrode, tungsten—Hi-Thoria (GE) .....	4-15	87	
Milling and center drilling machines (Mott & Merryweather) .....	4-15	64		Air cage, dimensional—Dimensionair (Federal) .....	2-1	64		Elevating table, hydraulic, tilt-top (Lyon-Raymond) .....	5-1	53	
Milling attachment, circular, manual feed and power feed, 12-in. (Cincinnati Milling) .....	4-1	58		Alkyd molding compound—Plascon Alkyd, 422 (Plaskon) .....	6-15	150		Elevator, light duty, portable (Harrett-Cravens) .....	5-1	52	
Milling attachment, vertical (Nichols) .....	4-15	64		Alloy, for dry-benching—"Chemalloy" (Chemalloy) .....	5-15	88		Engine jacket water coolers (Young Radiator) .....	6-1	58	
Milling machine for aircraft skins—Hypro, type 100 (Giddings & Lewis) .....	6-15	64		Angle sawing by power, tractor for (Black & Decker) .....	4-15	80		Exhaust, catalytic, for gas lift trucks—OCM (Oxy-Catalyst) .....	1-1	56	
Milling machine, for weight balancing connecting rods (Mott & Merryweather) .....	4-15	76		Ball bearing, sealed—R. F. Series (Landis & Gyr) .....	2-1	64		Fastener, for interior trim—"Speed Clip" (Tinnerman) .....	2-1	62	
Milling machine reverse image attachment (Cincinnati Milling) .....	6-1	54		Bonding agent, rubber-to-metal (GE) .....	5-15	87		Fastener, push-on clip type—"Speed Clip" (Tinnerman) .....	3-15	258	
Molding machine, plastics injection (Hydraulic Press) .....	2-1	58		Box and skid top tiering units (Ironbound Box) .....	5-1	53		File holder, the Over-Tang (Remont Mfg.) .....	4-15	74	
Molding machine, plastics injection (Hydraulic Press) .....	2-15	62		Box, knock-down, for materials handling—Hazen (Webb) .....	5-1	51		Files, double-cut, staggered tooth (Diston) .....	4-15	80	
Nibbling machines (American Chain) .....	4-1	58		Box, pallet type, for tiering (Ironbound Box) .....	5-1	50		Finish, heat-resistant, silicon base—Sicon (Midland Industrial) .....	3-15	260	
Oil measuring dispenser (Fauver) .....	6-1	56		Breakdown testing machine (Deister) .....	6-15	88		Floor carpeting, felt, plastic coated—Burtex 180-634 (Burlington Mills) .....	2-1	72	
Pivot polishing machine—Type 241 (Hauer) .....	4-15	72		Bridge interlock, overhead, automatic (Cleveland Crane) .....	5-1	50		Fork lift truck, electric, redesigned—Clipper (Clark Equipment) .....	3-1	51	
Planer and miller (combination machine) (Giddings & Lewis) .....	3-1	49		Bushings, precision, for grinding wheels (Norton) .....	3-15	262		Fork lift truck, electric, redesigned—"Tier-Master" (Mobilift) .....	2-15	94	
Plastics injection molding machine (Hydraulic Press) .....	2-1	58		Casters, swivel and rigid, pressed steel—Series 21, 31, 33 (Fairbanks) .....	5-1	50		Fork truck, automatic side-loading—Side-loader (Automatic Transportation) .....	6-1	102	
Plastics injection molding machine (Hydraulic Press) .....	2-15	62		Chain hoist, electric—Rocket "61" (David Round) .....	5-1	53		Fork truck device—Pul-Pac (Clark Equipment) .....	1-15	103	
Polishing machine, centerless—type 101 (Production Machine) .....	3-15	246		Chain hoist, electric—Type J-C (Robbins & Myers) .....	5-1	50		Fork truck snow plow device (Clark Equipment) .....	2-1	98	
Power squaring shears—improved new series (Columbia Mach.) .....	2-15	62		Chains, sling type (American Chain) .....	5-1	102		Fuel pump, electric, automotive (Bendix Aviation) .....	2-15	86	
Power table, multidrive, for rotary work (Niagara Mach.) .....	2-1	60		Cleaner, steam jet type (Livingstone) .....	5-15	84		Function plotter, automatic—Brown Electronik (Minneapolis-Honeywell) .....	6-1	66	
Power unit, hydraulic—Series T20, T30 and T60 (Vickers) .....	5-15	50		Cleaning tissue, for goggle and glass lenses—"Magic Lens Tissue" .....	5-15	69		Gages, strain type, self-compensating—SR-4 (Baldwin) .....	1-15	67	
Press, eccentric, two-point, blanking, forming, drawing—Model 2FE (Bliss) .....	3-15	237		Clutch-and-brake unit, friction type (Power Presses) .....	2-15	92		Gaging plugs, adjustable (Sheffield) .....	1-1	58	
Presses, compacting type, for powdered metals—Colton-Haller, models 6-125, 6-100 (Snyder) .....	4-1	60		Coating, plastic, air-drying—U. S. Royalguard (U. S. Rubber) .....	4-15	78		Grease, cold-milled, multi-purpose—Cosmolube (Houghton) .....	1-1	56	
Presses, hydraulic, small—5 and 8-ton—F-50A and F-80 (Hannafin) .....	5-15	78		Collar, adjustable, micrometer type, for milling machine cutter arbors (Dayton Rogers) .....	6-15	96		Grinder hand tool, powered—Hi-Power, Models No. 3500 and 3505 (Chicago Wheel) .....	3-1	80	
Press, for assembling cam shaft bushings—15-ton (Oilgear) .....	5-15	51		Coloring process for ferrous metal (Atomite Black) .....	2-1	62		Grinding wheels, vitrified bond, 79E (Chicago Wheel) .....	1-15	82	
Press, hydraulic, for drawing and forming with pipeless circuit (Elmer Rex) .....	5-15	72		Comparator for surface finish (Precisionaire—Sheffield) .....	1-15	94		Hat, industrial, lady's for safety—"Ray-ve" (Boyer-Campbell) .....	2-15	98	
Press, perforating, high speed, 150-ton, No. 8150 (Bliss) .....	5-15	50		Converter, for Wating tanks (Automotive Rubber) .....	1-15	96		Heater, for hot paint, double unit (Bede) .....	1-15	70	
Press, segmental notching type (V & O Press) .....	3-15	264		Coolers, for torque converters (Young Radiator) .....	6-15	88		Heater, for truck cab, fresh-air type—Reo (Reo Motor) .....	3-1	51	
Quill mounting, ball roll type (Pratt & Whitney) .....	2-1	66		Copying machine, inkless, fumeless—BW Copyflex (Charles Bruning) .....	1-1	58		Hoists, electric—Frame B Speedway (American Chain) .....	5-1	102	
Rotary surface grinder (Mattison) .....	4-1	55		Crane, for nonelectric service (American MonoRail) .....	5-15	71		Hoists, hand—Wright Safeway (American Chain) .....	5-1	102	
Rotary surface grinder, (Hanchett type) No. 24A (Mattison) .....	1-15	66		Crane, with clutch eliminated (Coles Cranes) .....	5-1	52		Hot paint heater, double unit (Bede) .....	1-15	70	
				Crane-electric inspection method—high-speed (GE) .....	2-15	78					
				Cylinder mounting, labor-saving (Miller Motor) .....	4-1	67					
				Cylinders, air, small universal mounting—Han-D-Air (Bellows) .....	6-15	152					
				Cylinders, large diameter—8 in. to 20 in. (Miller Motor) .....	2-15	76					
				Cylinders, square-design—space-saving (Miller Motor) .....	3-1	51					



New Products (Continued)	Issue	Page	New Products (Continued)	Issue	Page	New Products (Continued)	Issue	Page
Hourmeter, for clocking engines (AC Spark Plug) .....	3-15	260	Relay, reclosing, type ACR (GE) .....	6-1	68	Truck (industrial) power unit Diesel-electric (Ready-Power) .....	5-1	102
Hydraulic scoop accessory (Towmotor) .....	1-1	56	Resin, rigid plastic, polyvinyl (B. F. Goodrich) .....	5-1	66	Truck, pallet — Hydro-Lift (Clark Equipment) .....	5-1	48
Indicator, for weight, redesigned (W. C. Dillon) .....	3-1	53	Roll surface temperature detector (Leeds & Northrup) .....	4-15	84	Truck, roll-handling, specialized (Lewis-Shepard) .....	3-1	52
Industrial truck, diesel, with fluid transmission — "Diesel-Lift" (Yale & Towne) .....	6-1	58	Rotary gear pumps—constant-oil (John S. Barnes) .....	6-15	84	Trucks, fork lift, electric—Model F-31-T 6000 lb cap. and Model F-26-T 2000 lb cap. (Elliott-Parker) .....	5-1	51
Lift truck, telescopic — Transacker SCLT (Automatic Transportation) .....	1-15	96	Sander, for light production work — Smoothie (Clarke Sander) .....	2-1	64	Trucks, fork lift (5)—Type F8 (Baker-Raulang) .....	5-1	110
Load cells, SR-4, redesigned—U-1 series (Baldwin-Lima-Hamilton) .....	3-15	254	Sander, single-pad, air type (Sundstrand) .....	3-15	262	Trucks, fork lift, gasoline—Model GP-30-T 4000 lb cap. (Elliott-Parker) .....	5-1	51
Lubricant, inter-leaf, for springs "Moly Disul" (Tut-hill Springs) .....	1-15	68	Scale, platform beam type—Load King (Yale & Towne) .....	4-1	62	Trucks, fork lift, short length 2000 lb cap.—Models F120-24 and F120-15 (Buda) .....	5-1	52
Lubrication device, portable—LubriKit (Fauver) .....	3-1	50	Sealer washer of fabricated compound — Prestite 169 (Prestite Eng.) .....	3-1	52	Trucks, fork lift, Models E and ER—Tier-Master Lev-R-Matic (Mobilift) .....	5-1	49
Materials handling "foldaway" lift truck forks (Automatic Transportation) .....	6-1	72	Sealing tape for cartons—No. 711 (Minnesota Mining) .....	5-15	64	Trucks, hand pallet type 2000 lb cap. (Lyon-Raymond) .....	5-1	53
Materials handling "Swing-Stacker" (Thew Shovel) .....	6-1	72	Shock absorber, hydraulic, French—Columbus Luxury Ride (Hecthethorn) .....	1-1	60	Trucks, hand type—magnesium (Magline) .....	5-15	80
Measuring machine, precision—Type F234 (Hawthorne) .....	3-1	51	Sling, wire rope type (American Chain) .....	5-1	102	Trucks, tiering and pallet type — SpaceMaker (Lyon-Raymond) .....	5-1	53
Metal, heavy, non-cutting—Hevimet (Carboloy) .....	2-15	92	Speed nut, push-on type, self-retaining (Tinnerman) .....	4-15	74	Trucks with automotive type controls — Skylift LFS—70, 80, 90, 100 (Automatic Transportation) .....	5-1	104
Metals, rigidized, for door trim (Rigidized Metals) .....	5-15	87	Speed reducer, double-reduction type DB (Westinghouse) .....	6-1	58	Truck, telescopic — Hi-Lift Power Ox (Barrett-Cravens) .....	5-1	52
Meters, radioactivity detection type — Universal Roentgen (Westinghouse) .....	1-15	62	Speed reducer, Cone-Drive (Michigan Tool) .....	1-1	58	Truck, with labor saving pump — Load-Lift (Market Forge) .....	5-1	108
Mirror, non-glass (Flexmir Products) .....	2-15	88	Spot welding control (Westinghouse) .....	3-1	65	Valve grinder, semi-automatic (Norton) .....	1-15	98
Motor, A-C, redesigned—Life-Line, type SK (Westinghouse) .....	1-15	68	Spray valve, self-compensating surfaces (Farval) .....	1-15	62	Valves, for speed control — "Flo-Set" (Hanna Eng.) .....	1-15	74
Motor starter for machines—Motor Watchman, class 10-100-SI (Westinghouse) .....	3-1	53	SR-4 load cells (Baldwin-Lima-Hamilton) .....	6-1	77	Valves, surge damping (Densco Eng.) .....	6-15	87
Nut, push-on type, self-retaining — Speed Nut (Tinnerman) .....	4-15	74	Steam gun, heavy duty—Model 502 (Oakite) .....	6-15	94	Vise, for holding milling cutters (Ingersoll Milling) .....	4-1	68
Oil filter cartridge—Micro-Fine (Wiconair Motor) .....	4-1	68	Steam spray gun for paint—S-100 (Kellogg) .....	1-15	64	Weight indicator, redesigned (W. C. Dillon) .....	3-1	53
Oscillograph, recording type 5-116 (Consolidated Eng.) .....	1-15	74	Strain gauge, self-compensating SR-435 (Baldwin) .....	1-15	67	Welding electrode, resistance type — "Nu-Wrinkle Cap" (Mallory) .....	6-15	94
Oscilloscope, space saving—Model 476 Microscope (Simpson Electric) .....	5-1	66	Strain recorder, inkless, high-speed — Baldwin-Sanborn (Baldwin) .....	2-1	64	Wire-tyer, Model D, plus special coil cart (Inland Wire) .....	5-1	49
Packaging tape, luminescent (Century Coating) .....	4-15	84	Strain recorder, SR-4, strip-chart type (Baldwin) .....	1-15	76	Wrench, impact, multi-purpose — Model 2EW (Mail Tool) .....	2-15	132
Pallet and skid racks (Fab-Weld) .....	5-1	48	Strapping equipment — Steel-binder and Bulkholder (A. J. Gerrard) .....	5-1	49			
Pallet and skid racks, prefab'd (American Metals) .....	5-1	66	Strapping, for parcels, non-metallic—Fiber-Strap (A. J. Gerrard) .....	6-15	90			
Pallet box, tiering type (Ironbound Box) .....	5-1	50	Switch, selector type, rotary (Leeds & Northrup) .....	3-15	254			
Pallet containers, wire mesh—Palletainers (Union Steel Products) .....	5-15	69	Tachometer, electric, simplified "Standard" "Recorder" and "Vac-Tach" Models (Stewart-Warner) .....	4-1	62			
Pallet truck, electric—Model W (Towmotor) .....	2-1	62	Tapes, sealing types (Technical Standard) .....	4-1	64			
Pallet trucks, hand type, powered—Hydro-Lift and Electro-Lift (Clark Equipment) .....	3-1	51	Telescoping lift device, for lift trucks (Yale & Towne) .....	4-1	64			
Piston ring, oil-control type—Pedrick Furniflex C88 (Wilkening) .....	1-15	62	Temperature detector for roll surfaces (Leeds & Northrup) .....	4-15	84			
Plant layout kit, experimental ("Visual" Planning) .....	1-15	85	Temperature recorder — Eletronik (Minneapolis-Honeywell) .....	4-1	68			
Plastic coating, air-drying—U. S. Royalguard (U. S. Rubber) .....	4-15	78	Testing machine, "breakdown" (Deister Machine) .....	6-15	88			
Plate-coils for industrial heating—Style 90 (Kold-Hold) .....	1-1	56	Tiering unit, skid and box type (Ironbound Box) .....	5-1	53			
Plating process—Chronosol (Ward Leonard Electric) .....	2-1	72	Timing devices, pneumatic—Meadmatic Model 4, Meadmatic Model 5 (Mead Specialties) .....	3-1	50			
Plating tank converter (Automatic Rubber) .....	1-15	96	Tire tube, butyl (Firestone) .....	3-1	53			
Prime mover with platform or bucket—Model 15 (Prime Mover) .....	6-1	74	Tire, tubeless, puncture-proof (Firestone) .....	2-15	96			
Protector for power sawing (Black & Decker) .....	4-15	80	Torque converter coolers (Young Radiator) .....	6-15	88			
Puller-and-pusher, for Clipper lift trucks (Clark Equipment) .....	6-1	66	Trackmobile for freight-car spotting (Whiting) .....	1-15	67			
Racks, pallet and skid type (Fab-Weld) .....	5-1	48	Tractor, light-duty, 1600 lb (Automatic Transportation) .....	1-15	100			
Radioactivity detector, meters—Universal Roentgen (Westinghouse) .....	1-15	62	Tractor, rear control electric featherweight — Model PTE (Automatic Transportation) .....	6-15	146			
Radio frequency generator—5-kw-for induction heating (Westinghouse) .....	5-15	64	Tractor-shovels — "Payloaders"—Models HY, HA and T-12 (Frank G. Hough) .....	5-1	51			
Recorder, electronic, for test data—Speedomax (Leeds & Northrup) .....	4-1	64	Trolley, hand push type (Webb) .....	6-1	68			
Recorder, electronic, two-gen—Speedomax (Leeds & Northrup) .....	3-1	50	Trolleys, lightweight—Wright-Way (American Chain) .....	4-15	88			
			Truck door fastener, No. 2300 and 2350 (W. H. Miner) .....	3-1	53			
			Truck, for cartons — 1BZ (Wellington Machine) .....	5-1	50			
			Truck, for dies and molds—Rite Hite (Wellington Machine) .....	5-1	106			
			Truck, fork lift, heavy-duty—Liftrak (Silent Roist) .....	5-1	112			
			Truck, freight type, 3-way operating (Market Forge) .....	5-1	106			
			Truck, industrial, electric—"Clipper" (Clark Equipment) .....	5-1	48			

Old Products for Aircraft (Continued)	Issue	Page	New Products (Features) (Continued)	Issue	Page	Production Methods (Continued)	Issue	Page
Milling machine, precision (Farnham) .....	5-1	68	Monthly sales of replacement parts and accessories in the U. S., 1944-1950 .....	3-15	88	How Cadillac is equipping plant to build Walker Bull-Dog tanks .....	6-1	42
Mount, cup type, all-metal Met-Lex, Series 7002 (Robinson Aviation) .....	1-15	52	New governor for wide range of engines (Hoof Fro.) .....	1-1	48	How tool life is affected by heat-resisting alloys .....	4-1	52
Nut assembly, floating anchor type—Plate-Lok (Boots Aircraft Nut) .....	2-1	68	Special machine grinds and polishes ends of valve tappets (Hoern & Ditts) .....	6-1	63	Huge hydraulic press for making large aircraft parts .....	1-1	50
Nuts, and channel anchor type (Elastic Stop Nut) .....	6-1	64	Throttle return check on Powerlite carburetor .....	3-1	40	Improved finishing machine for zinc base die castings, the Gyro-finisher .....	5-1	58
Omnigrator, seven-function—Model U7R-1 (National Aero-nautical) .....	1-15	52	Wholesale value of repair parts and accessories, sales 1934-1950 .....	3-15	88	Improved handling methods in new GM Vauxhall plant .....	6-1	58
Optical inspection instrument—"Borescope" (Testa Mfg.) .....	6-1	62	Noise .....	2-15	40	Liquid blasting saves polishing time .....	1-15	46
Pilot control, automatic (Electric Eng.) .....	1-15	90	Silencing aircraft engines .....	2-15	40	Machining and hardening in the same setup (Ford) .....	1-15	50
Planishing machine (Huford Machine Works) .....	3-1	54	Organizations—See Associations			Making the Cadillac bumper and guard assembly .....	4-1	47
Range and broadcast receiver Narco LFR-1 (National Aeronautical) .....	5-1	68	Paints—See Finishes, Color Trends			Modified standard carbide tool does intricate form-turning job .....	3-15	224
Relay, dynamically balanced, sub-miniature (Hufco Industries) .....	3-1	54	Parts Descriptions—See New Products & New Developments			Nash's new plant for making Rambler bodies .....	2-15	34
Relay, miniature, hermetically sealed—"Diamond H" (Hart Mfg.) .....	1-15	52	Pistons—See New Products & New Developments			New concepts for defense tooling .....	4-15	37
Riveter's tape, No. 775 (Minnesota Mining) .....	1-15	88	Plant Changes—New & Expansion			Newest methods of fabricating honeycomb aircraft components (Northrop) .....	6-15	42
Rubber compound, Neoprene-based, for aircraft universal joint grease-retainer covers (Staintat Rubber) .....	1-1	62	Aeroproducts doubles size of plant .....	3-1	40	New methods reduce cost of polishing die castings (Ternstedt) .....	1-1	49
Rule for computing aircraft data—"Sky Rule" (Douglas Aircraft) .....	6-1	62	GM to convert Kansas City plant to jet fighter production .....	1-15	35	Optical airframe tooling, a new assembly technique .....	4-15	38
Sheet, thermoplastic flame-resistant Royale (U. S. Rubber) .....	2-15	134	Improved handling methods in new GM Vauxhall plant .....	5-1	38	Pescor's new plant for making flexible production setup .....	1-1	32
Shrink finishing machine (Huford Machine Works) .....	3-1	54	Nash's new plant for making Rambler bodies .....	2-15	34	Production planning boosts department efficiencies (Douglas Aircraft) .....	4-1	46
Solvent, rapid dry, safety type (Fine Organics) .....	1-15	90	Pescor's new plant features flexible production setup .....	1-1	32	Rapid riveting cut time in half (Harley-Davidson) .....	1-15	46
Stabilizer actuator assembly (Electrical Eng. and Mfg.) .....	1-15	90	Plastics—See also New Products & New Developments			Significant operations on the Chrysler torque converter .....	4-1	38
Test stand, hot-cold (Electro Mechanical Devices) .....	2-15	136	Decorating plastic parts by metallizing .....	5-1	54	Simplified bolt design reduces soldering joints .....	6-1	48
Tire, triple tread (Goodrich) .....	5-15	90	Polishing—See Finishes & Production Methods			Some outstanding operations at V-8 engine plant—Part 2 .....	2-1	46
Varnish, impregnating—ABC (Frank S. Bacon) .....	1-15	88	Politics—See Government Agencies			Stepped diameter parts milled to close tolerances (Molloy Mfg.) .....	2-15	50
Vibrator for instrument panel—Safe Flight (Safe Flight Instrument) .....	2-15	138	Prices, Changes			Swaged generator pole shoes conserve copper wire (Delco Rem) .....	1-1	40
			Car price, weight and bodies table .....	3-15	123	Two new inspection devices used at Ford's .....	3-1	44
			Consumers' Price Index .....	3-15	81	Vibration control mounting in production (Lord Mfg.) .....	3-1	52
			Wholesale prices of selected commodities .....	3-15	81			
<b>New Methods</b>			<b>Production Methods—See also</b>			<b>Production—Including Factory Sales—See also Business Activities, Foreign Business Activities</b>		
Aluminum cylinders without cast iron liners .....	2-15	32	Welding & Cutting			Aircraft and aircraft engine production .....	3-15	119
Engineering developments in aircraft production (Northrop) .....	5-15	34	Advanced equipment for mass producing farm tractors (Allis-Chalmers) .....	6-15	48	Canadian motor vehicle production—by months .....	3-15	89
Extruded hollow propeller blades (Curtiss-Wright) .....	4-1	32	Advanced production developments (abstract) .....	2-1	32	Civil aircraft shipments, by months, 1950-1949 .....	3-15	120
Fixed-needle wing spars reduce plane weight .....	5-1	80	Advanced production methods in die-contained axle plants (Salisbury Axle Works) .....	6-15	38	Civilian and military truck trailer production, 1942-1945 .....	3-15	86
Liquid blasting saves die polishing time .....	1-15	46	Aircraft handling costs cut by double duty technique (Northrop) .....	5-1	44	Factory sales of special types of vehicles .....	3-15	84
Measuring and recording muffler efficiency .....	5-15	52	Aluminum cylinders without cast iron liners .....	2-15	32	Factory sales of vehicles to domestic and foreign markets .....	3-15	84
New automatic hidden arc welding (Lincoln Electric) .....	3-1	35	Assembling large chassis in modern British plant (Leyland Motors) .....	3-1	42	Farm and non-farm tractor shipments, 1940-1949, in units and their wholesale values .....	3-15	87
New cleaning method eliminates broken castings at General Foundries .....	3-15	224	Ausc's diversified production facilities .....	3-1	58	How shortages of aluminum may affect passenger cars .....	1-1	48
Newest methods of fabricating honeycomb aircraft components (Northrop) .....	6-15	42	Chrysler's new Oriflow shock absorber production requires new equipment .....	2-15	38	Monthly motor vehicle factory sales by years 1950-1949 .....	3-15	83
New methods reduce cost of polishing die castings (Ternstedt) .....	1-1	49	Chrysler's V-8 engine; pistons, rods and crankshafts in production—Part II .....	5-15	46	Monthly sales of replacement parts and accessories in the U. S., 1944-1950 .....	3-15	88
New process for production of tetraethyl lead (Du Pont) .....	6-1	52	Chrysler's V-8 engine; machining operations—Part I .....	3-1	30	Motor bus factory sales by type of bus .....	3-15	86
Optical airframe tooling, a new assembly technique (Republic) .....	4-15	38	Contour forming parts for jet engines .....	4-15	45	Motor truck factory sales by G. W. W., 1946-1950 .....	3-15	85
Production development of a jettisonable fuel tank (Lockheed) .....	1-15	44	Controlled atmosphere enclosure for assembly of Rec engines .....	6-1	32	Motor vehicle production in Canada .....	3-15	89
Swaged generator pole shoes conserve copper wire (Delco Rem) .....	1-1	40	Decorating plastic parts by metallizing .....	5-1	54	1949 tractor shipments by type and hp ratings .....	3-15	87



Production Methods (Continued)		Issue Page	Scrapping—See Junking		Issue Page	Tin Industry—See Metals		Issue Page
Shipments of complete civil aircraft and other products of their plants, 1950-1949 .....			3-15 119			Tires		
Truck trailer shipments by months, in units and their value .....			3-15 86			Shipments of car, truck and bus tires .....		
Truck trailer shipments, by type .....			3-15 86			3-15 177		
Wholesale value of repair parts and accessories, sales 1934-1950 .....			3-15 88			Tool Design—See also New Products and New Developments		
World motor vehicle production, 1949-1950 .....			3-15 88			How tool life is affected by heat resisting alloys .....		
<b>Q</b>						Modified standard carbide tool does intricate form-turning job .....		
<b>Quality Control</b>						3-15 224		
People, piston rings, and quality control (abstract) .....			6-15 126			<b>Tractors</b>		
Quality Control convention emphasizes military requirements .....			6-15 52			Allis-Chalmers three new crawler tractors, HD-9, 15 & 20 .....		
Quality control eliminates unnecessary operations (abstract) .....			6-15 122			Farm and non-farm tractor shipments, 1940-1949, in units and their wholesale value .....		
Quality control in parts manufacturing (abstract) .....			6-15 124			Farm tractors mass produced with advanced equipment at Allis-Chalmers .....		
<b>R</b>						1949 tractor shipments by type and hp ratings .....		
<b>Racing—See Contests</b>						Tracklaying tractor specifications .....		
<b>Railroads &amp; Rail Cars</b>						Tractor demand to continue heavy in '51 .....		
Diesel engines for use in Diesel electric locomotives (specifications) .....			3-15 170			Tractor specifications—wheel types .....		
<b>Registrations—See also Aviation, Motor Boats, Motorcycles, For New Car Registrations, See Sales</b>						Tractor use of liquefied petroleum gas (abstract) .....		
Average size of class 1 intercity bus company .....			3-15 148			2-1 36		
Cars in use by makes, states and model year .....			3-15 98			<b>Traffic Vehicle</b>		
Civil aircraft registrations—airports in use .....			3-15 121			More turnpikes to handle modern traffic .....		
Four-engine civil aircraft .....			3-15 121			6-1 34		
1949 Canadian motor vehicle registrations—by Provinces .....			3-15 89			<b>Trailers</b>		
Number and per cent of cars in use, by age groups .....			3-15 97			Civilian and military truck trailer production, 1942-1948 .....		
Number and per cent of trucks in use, by age groups .....			3-15 97			Truck trailer shipments by months, in units and their value .....		
Number and value of buses owned .....			3-15 148			Truck trailer shipments, by type .....		
Passenger cars in use by makes and by model year .....			3-15 114			3-15 86		
Ranking of states according to total registrations .....			3-15 96			3-15 86		
Registered civil aircraft by engine classification .....			3-15 121			<b>Transmissions</b>		
Registered civil aircraft by leading states .....			3-15 120			Automatic transmission patent suits to go to trial .....		
Registered civil aircraft by manufacturer .....			3-15 120			Chrysler's 1951 model offers torque converter, V-8 engine and power steering .....		
Single-engine civil aircraft .....			3-15 121			Designing planetary gears for automatic transmissions .....		
Taxicab, motorcycle and trailer registrations, 1950-1949 .....			3-15 96			Diesel electric drive for the Tournarrow .....		
Three-engine civil aircraft .....			3-15 121			Planetary transmission with hydraulic control (Hobbs of Eng.) .....		
Total U. S. motor vehicle registrations by states, 1950-1949 .....			3-15 95			Significant operations on the Chrysler torque converter .....		
Trucks in use by makes and by model year .....			3-15 115			Torque converter and transmission data on latest model cars .....		
Trucks in use by makes, states and model year .....			3-15 106			2-1 53		
Two-engine civil aircraft .....			3-15 121			<b>Truck Engines—See Engines</b>		
U. S. motor vehicle registrations, 1900-1950 .....			3-15 94			<b>Trucks</b>		
World and U. S. registrations of motor vehicles .....			3-15 95			Air Force needs fast fire trucks .....		
<b>Roads—See Highways</b>						Diesel electric drive for the Tournarrow .....		
<b>S</b>						Dodge brings out improved military vehicles, the Cable Splitter and Cargo Carrier .....		
<b>Sales—New Car Registrations. For Factory Sales—See Production</b>						Dodge trucks improved for 1951 .....		
New car and truck registrations, by years, 1929-1950 .....			3-15 92			GMC 1951 models introduce light duty trucks .....		
New car registrations by months, 1946-1950 .....			3-15 91			IHC's two new military trucks—the M-41 and M-51 .....		
New motor vehicle registrations, by states .....			3-15 91			Motor truck factory sales by G. V. W., 1946-1950 .....		
New passenger car registrations by makes, by years .....			3-15 90			New truck registrations by makes and G. V. W. .....		
New truck registrations by makes and G. V. W. .....			3-15 92			New truck registrations by makes, by years .....		
New truck registrations by makes, by years .....			3-15 90			1950 motor truck factory sales by gross vehicle weights .....		
1950 New car registrations by rank .....			3-15 92			1951 truck specifications .....		
1950 new truck registrations—by rank .....			3-15 92			Private and for-hire trucking, 1936-1949 .....		
Regional sales of new passenger cars .....			3-15 91			Rear axle designed for short wheelbase truck tractors (Timken-Detroit) .....		
						What makes the Reo Eager Beaver waterproof .....		
						2-1 45		
						<b>U</b>		
						Unions—See Associations		
						<b>V</b>		
						<b>Vibration</b>		
						Torsional vibrations minimized in reverse and reduction gears .....		
						Vibration control mountings in production (Lord Mfg.) .....		

W			Z		
Wages	Issue	Page	Welding & Cutting	Issue	Page
Earnings of production workers, hourly and weekly .....	3-15	80	New automatic hidden arc welding .....	3-1	35
			Zinc Industry—See Metals		

## Index of AUTHORS Contributing to ATOMOTIVE INDUSTRIES

B			F			J		
Issue	Page		Issue	Page		Issue	Page	
Barnard, D. P.			Fernald, F. W.			Jackson, Robert T.		
Role of gasoline in engine development .....	2-1	86	Turbochargers in commercial aviation .....	5-15	39	The fastest "500" at Indianapolis Race .....	6-15	34
Bede, James A.			Finger, H. B.			K		
Hot lacquer spraying problems solved .....	1-15	48	Surging in centrifugal and axial-flow compressors .....	5-15	105	Kastelowitz, A.		
Boerckel, William F.			Freeman, T. F.			Optical airframe tooling, a new assembly technique .....	4-15	38
Metals—analysis of market .....	4-1	43	Newest methods of fabricating honeycomb aircraft components .....	6-15	42	Kay, R. Raymond		
Metals—analysis of market .....	5-1	55	Frost, E. R.			1951 Indianapolis Race previews .....	5-1	32
Metals—analysis of market .....	6-1	49	Designing to expedite handling of body units .....	5-1	47	L		
Bradley, W. F.			G			Le Tourneman, R. G.		
Automatic clutch control introduced in France .....	6-1	50	Geschelin, Joseph			Engineering details of Diesel electric drive for heavy equipment—The Tourneman .....	3-15	220
Automotive activities in Italy—Italy's Automobile Show .....	5-15	32	Advanced equipment for mass producing farm tractors .....	6-15	48	Loomis, R. C.		
Hutchins announces all light-alloy car .....	3-1	41	Advanced production developments .....	2-1	32	Flight experience with turbine propeller powered aircraft .....	5-15	106
Improved handling methods in new GM Vauxhall plant .....	5-1	38	Advanced production methods in self-contained axle plant .....	6-15	38	Lucht, Fred W.		
1951 International Auto Salon, Renault in production on new Frigate model .....	4-15	42	Aisco's diversified production facilities .....	3-1	38	Drilling cast iron with carbide tipped tools .....	6-15	98
Simca of France starts production on new Aronde model .....	6-15	46	Buick's new bodies on 1951 models .....	1-15	45	Mc		
Bringewald, August			Chrysler's new V-8 engine machining operations—Part I .....	3-1	30	MacNew, Thomas		
German aircraft manufacturing methods .....	2-1	36	Chrysler V-8 engine: pistons, rods and crankshafts in production—Part II .....	5-15	46	More turnpikes to handle modern traffic .....	6-1	34
Brown, A. T.			Controlled atmosphere enclosure for assembly of Reo engines .....	6-1	32	McGuen, C. L.		
Economics of propane as an engine fuel .....	2-15	42	Efficient materials handling vital to automotive production .....	5-1	34	GM's 195X HC engine .....	6-1	46
Brown, W. B.			Flexible production setup at Pesco's new plant .....	1-1	32	McLarren, Robert		
Series 2 oils pay their way in Diesels .....	2-1	92	Gemmer's new power steering gear, the Hydraguide .....	2-1	50	Airbriefs .....	1-15	54
Bullock, R. O.			How Cadillac is equipping plant to build Walker Bull-Dog tanks .....	6-1	42	Airbriefs .....	2-15	82
Surging in centrifugal and axial-flow compressors .....	5-15	105	Machining and hardening in the same setup .....	1-15	50	Airbriefs .....	3-15	186
Byers, Roscoe C.			Metals shortages create many production problems .....	4-15	46	Airbriefs .....	4-15	54
Quality control eliminates unnecessary operation (abstract) .....	6-15	122	New methods reduce costs of polishing die castings .....	1-1	49	Airbriefs .....	5-15	60
C			Significant operations on the Chrysler torque converter .....	4-1	38	Airbriefs .....	6-15	56
Chase, Herbert			Some outstanding operations at Studebaker V-8 engine plant—Part 2 .....	2-1	46	Aircraft industry must outdo World War II achievements .....	1-15	38
Swaged generator pole shoes conserve copper wire .....	1-1	40	Gibian, E. F.			M		
Cleveland, A. E.			Quality control in parts manufacturing (abstract) .....	6-15	124	Mesick, Col. Benjamin S.		
Strain-gage method of determining the running lash of L-head and overhead-valve engines .....	4-1	92	Gist, H. S.			Materials of military motorized equipment .....	4-1	50
Cook, William H.			Gears of exceptional quality .....	5-15	42	Middleton, L. H.		
Flight characteristics of the Boeing B-47 Stratojet .....	5-15	105	H			Minimum energy loss in ignition systems .....	2-1	92
Custer, James R.			Hartzell, H. L.			N		
Automatic transmission patent suits to go to trial .....	1-1	47	Ignition problems in damp weather .....	2-1	92	Neugebauer, Dr. F. J.		
Impact of rearmament program discussed at SAE meeting .....	2-1	32	Heath, D. P.			Air Force developing multifuel lightweight Diesel .....	6-15	32
D			Motor fuel volatility trends .....	2-1	91	P		
Davis, M. E.			Heldt, P. M.			Peroutky, Donald C.		
Air Force developing multifuel lightweight Diesel .....	6-15	32	Aluminum cylinders without cast iron liners .....	2-15	32	High frequency ignition needs no breaker points .....	1-1	34
Downs, William D.			Hendrickson, E. O.			Peters, M. F.		
Starters for turbojet engines .....	2-1	35	Turbochargers in commercial aviation .....	5-15	39	Minimum energy loss in ignition systems .....	2-1	92
E			Holaday, W. M.			Petersen, Alfred H.		
Etchells, E. B.			Motor fuel volatility trends .....	2-1	91	Development of steel shapes for aircraft components .....	3-15	204
Lashograph—instrument for observing valve lash in a running engine .....	4-1	51	Huover, Carl E.			Production development of a jettisonable fuel tank .....	1-15	44
Everett, H. E.			People, piston rings, and quality control (abstract) .....	6-15	126	Peterson, E. R.		
Tractor demand to continue heavy in '51 .....	1-15	42	Herger, O. J.			Aircraft handling costs cut by double duty technique .....	5-1	44
			Stresses imposed by processing .....	2-1	33	Piper, T. E.		
						Engineering developments in aircraft production .....	5-15	34

<b>Q</b>		<b>Issue</b>	<b>Page</b>	<b>Schaine, Robert</b>		<b>Issue</b>	<b>Page</b>	<b>Stoner, E. F.</b>		<b>Issue</b>	<b>Page</b>
<b>Quinnely, Capt. J. L.</b>				<b>Army fighting in Korea with World War II vehicles .....</b>		4-1	34	<b>How aircraft design changes can be controlled .....</b>		1-1	38
<b>Military tactical wheeled vehicle body requirements .....</b>		4-1	50	<b>Schilling, Robert</b>				<b>W</b>			
<b>R</b>				<b>Operational stresses in automobile parts .....</b>		2-1	34	<b>Westrate, Leonard</b>			
<b>Riegel, Glen C.</b>				<b>Schwitzer, C. M.</b>				<b>Defense again the No. 1 job...</b>		4-15	34
<b>Boron treated steels prove efficient in use .....</b>		5-1	98	<b>Two new gear materials .....</b>		1-1	42	<b>What's ahead for the automobile industry .....</b>		1-15	32
<b>Robbins, Robert M.</b>				<b>Scott, C. N.</b>				<b>White, A. W.</b>			
<b>Flight characteristics of the Boeing B-47 Stratojet .....</b>		5-15	105	<b>High energy multiple spark ignition systems for jets .....</b>		2-1	35	<b>Turbosuperchargers in commercial aviation .....</b>		-5-15	39
<b>Roberts, H. H.</b>				<b>Scott, David</b>				<b>Wilson, David J.</b>			
<b>Military emphasis at Quality Control convention .....</b>		6-15	52	<b>Motor vehicles of Russia and her satellites .....</b>		4-15	32	<b>Argentina to develop own aircraft industry .....</b>		6-1	51
<b>Rudolf, Walter</b>				<b>Shannon, E. D.</b>				<b>Wolfe, Gen. K. B. (USAF)</b>			
<b>Vibration control mountings in production .....</b>		2-1	52	<b>Flight experience with turbine propeller powered aircraft ..</b>		5-15	106	<b>Huge hydraulic presses needed for making large aircraft parts .....</b>		1-1	50
<b>Ryder, F. A.</b>				<b>Sheets, H. E.</b>				<b>New concepts for defense tooling .....</b>		4-15	37
<b>Latest developments in vehicle heating .....</b>		1-15	36	<b>High energy multiple spark ignition systems for jets .....</b>		2-1	35	<b>Z</b>			
<b>S</b>				<b>Short, B. H.</b>				<b>Wulfssohn, C. R.</b>			
<b>Samuelson, Marvin J.</b>				<b>Ignition problems in damp weather .....</b>		2-1	92	<b>Production planning boosts department efficiencies .....</b>		4-1	46
<b>Tractor use of liquefied petroleum gas .....</b>		2-1	36	<b>Sicklesteel, D. T.</b>				<b>Zipkin, M. A.</b>			
<b>Sandham, Wilmot</b>				<b>Designing planetary gears for automatic transmissions .....</b>		3-1	26	<b>High energy multiple spark ignition systems for jets .....</b>		2-1	35
<b>Engineering analysis of 1951 Mobilgas Economy Run .....</b>		4-15	44	<b>Smith, Robert</b>							
				<b>Conveyer testing of generator regulators .....</b>		5-1	40				

**Index of COMPANIES Mentioned in AUTOMOTIVE INDUSTRIES**

<b>A</b>		<b>Issue</b>	<b>Page</b>	<b>American Monorail Co.</b>		<b>Issue</b>	<b>Page</b>	<b>Baldwin-Lime-Hamilton Corp.</b>		<b>Issue</b>	<b>Page</b>
<b>ACF-Hill Motors Co.</b>				<b>Crane, for constant service ...</b>		5-15	71	<b>(Continued)</b>			
<b>Economics of propane as an engine fuel .....</b>		2-15	42	<b>Dispatch carrier, automatic ...</b>		5-1	52	<b>SR-4 load cells .....</b>		6-1	77
<b>AC Spark Plug Div., General Motors Corp.</b>				<b>Aronson Machine Co.</b>				<b>Strain recorder, inkless, high-speed—Baldwin-Sanborn ...</b>		2-1	64
<b>Hourmeter, for clocking engines .....</b>		3-15	260	<b>Welding work positioner—Model 14BT500 .....</b>		2-15	68	<b>Strain recorder, SR-4, strip-chart type .....</b>		1-15	76
<b>Aeroproducts Div., General Motors Corp.</b>				<b>Atomite Black Co.</b>				<b>Barber-Colman Co.</b>			
<b>Doubles size of plant .....</b>		3-1	40	<b>Coloring process for ferrous metal .....</b>		2-1	62	<b>Actuator, for torque limiting—AYLC .....</b>		5-15	92
<b>Air Material Command</b>				<b>Austin-Western Co.</b>				<b>Barnes, John S., Corp.</b>			
<b>Air Force developing multifuel lightweight Diesel .....</b>		6-15	32	<b>Crane and boom, hydraulic ...</b>		5-1	52	<b>Rotary gear pumps—constant-flow .....</b>		6-15	84
<b>Air Reduction Co.</b>				<b>Auth Electric Co., Inc.</b>				<b>Barrett-Cravens Co.</b>			
<b>Electrode, non-consumable, of thoriated tungsten—Thor-Tung .....</b>		1-15	100	<b>Buzzer, midget, for aircraft or electronic instruments .....</b>		1-15	52	<b>Elevator, light duty, portable. Truck, telescopic—Hi-Lift Power Ox .....</b>		5-1	52
<b>Allis-Chalmers Mfg. Co., Tractor Div.</b>				<b>Automatic Transportation Co.</b>				<b>Bede Products, Inc.</b>			
<b>Advanced equipment for mass producing farm tractors ...</b>		6-15	48	<b>Fork truck, automatic sideloading—Sideloder .....</b>		6-1	102	<b>Heater, for hot paint, double unit .....</b>		1-15	70
<b>Three new crawler tractors, HD-9, HD-15 and HD-20 .....</b>		4-15	52	<b>Lift truck, telescoping—Transtacker SCLT .....</b>		1-15	96	<b>Hot lacquer spraying problems solved .....</b>		1-15	48
<b>Aluminum Co. of America</b>				<b>Materials handling "foldaway" lift truck forks .....</b>		6-1	72	<b>Bellows Co.</b>			
<b>Alloy, aluminum, super-strength—"XA78S" .....</b>		5-15	90	<b>Materials handling forklift pallet .....</b>		6-1	72	<b>Cylinders, air, small universal mounting—Han-D-Air .....</b>		6-15	152
<b>American Chain &amp; Cable Co., Inc.</b>				<b>Tractor, lightweight—1510 lb. Tractor, rear control electric featherweight—Model FTE .....</b>		6-15	146	<b>Besley, Charles H., &amp; Co.</b>			
<b>Chains, sling type .....</b>		5-1	102	<b>Trucks with automotive type controls—Skylift LFS—70, 80, 90, 100 .....</b>		5-1	104	<b>Grinder, double vertical spindle, for coil springs—No. 928-39/50 .....</b>		3-15	238
<b>Cutting machine, wet abrasive—Model 509 .....</b>		3-15	238	<b>Automotive Rubber Co.</b>				<b>Black &amp; Decker Mfg. Co.</b>			
<b>Cutting machine, wet abrasive type .....</b>		4-1	55	<b>Converter, for plating tanks ...</b>		1-15	96	<b>Protractor for power sawing ...</b>		4-15	80
<b>Hoists, electric—Frame B .....</b>		5-1	102	<b>Auto Specialties Mfg. Co.</b>				<b>Black Drill Co.</b>			
<b>Hoists, hand—Wright Safeway .....</b>		5-1	102	<b>Diversified production facilities for disk brakes and clutches at Hartford plant .....</b>		3-1	38	<b>Countersinking and deburring machine .....</b>		3-1	48
<b>Nibbling machines .....</b>		4-1	58	<b>B</b>				<b>Blanchard Machine Co.</b>			
<b>Sling, wire rope type .....</b>		5-1	102	<b>Bacon, Frederick S., Laboratories</b>				<b>Grinder, rotary table surface type, No. 16A3 .....</b>		1-15	58
<b>Wet abrasive cutting machine—Model 270 .....</b>		4-1	55	<b>Varnish, impregnating—ABC ..</b>		1-15	88	<b>Bliss, E. W., Co.</b>			
<b>American Chemical Paint Co.</b>				<b>Baker-Rauland Co.</b>				<b>Press, eccentric, two-point, blanking, forming, drawing—Model 2FE .....</b>		3-15	237
<b>Aluminum coating—alodizing brush-on kit .....</b>		1-1	62	<b>Trucks, fork lift (5) Type FS ..</b>		5-1	110	<b>Press, perforating, high speed, 150-ton, No. 8150 .....</b>		5-15	50
<b>American Metal Products Co.</b>				<b>Baldwin-Lime-Hamilton Corp.</b>				<b>Boeing Airplane Co.</b>			
<b>Pallet and skid racks, prefab'd .....</b>		5-1	66	<b>Differential pressurecell, SR-4—Type FMB .....</b>		4-1	62	<b>Flight characteristics of the Boeing B-47 Stratojet .....</b>		5-15	165
				<b>Gages, strain type, self-compensating—SR-4E .....</b>		1-15	67				
				<b>Load cells, SR-4, redesigned—U-1 series .....</b>		3-15	254				

	Issue	Page		Issue	Page		Issue	Page
<b>Boots Aircraft Nut Corp.</b>			<b>Clark Equipment Co.</b>			<b>Dillon, W. C. &amp; Co., Inc.</b>		
Nut assembly, floating anchor type—Plate-Lok .....	2-1	68	Fork lift truck, electric, redesigned—Clipper .....	3-1	51	Weight indicator, redesigned..	3-1	53
<b>Boyer-Campbell Co.</b>			Fork truck device—Pul-Pac .....	2-15	80	<b>Distont, Henry, &amp; Sons, Inc.</b>		
Hat, industrial, lady's, for safety—"Ray-ve" .....	2-15	96	Fork truck, heavy-duty, outdoor—15,000-lb Yardlift-150 .....	6-15	84	Files, double-cut, staggered tooth .....	4-15	80
<b>Bruning, Charles, Co., Inc.</b>			Fork truck snow plow device .....	2-1	98	<b>Dixie Tallyho, Inc.</b>		
Copying machine, inkless, fumeless—BW Copylux .....	1-1	58	Pallet trucks, hand type, powered—Hydro-Lift and Electro-Lift .....	3-1	51	Aircraft tire changer—"Tirematic" .....	5-1	68
<b>Buda Co., The</b>			Puller-and-pusher for Clipper lift trucks .....	6-1	66	<b>DoALL Co., The</b>		
Trucks, fork lift, short length—2000 lb cap.—Models FB20-24 and FB20-15 .....	5-1	52	Truck, industrial, electric—"Clipper" .....	5-1	48	Accessory table for machine tools .....	6-1	56
<b>Buick Motors Div., General Motors Corp.</b>			Truck, pallet—Hydro-Lift .....	5-1	48	Band saw angle guide blocks .....	4-15	69
1951 models with new bodies .....	1-15	45	<b>Clarke Sander Machine Co.</b>			Contour machine, with 36 in. stroke work table—Contourmatic .....	6-15	62
<b>Bullard Co., The</b>			Sander, for light production work—Smoothie .....	2-1	64	Diamond tooth band, for contour sawing .....	6-15	72
Boring, milling, and drilling machine, 4-way bed .....	6-15	72	<b>Cleveland Crane &amp; Eng. Co.</b>			Hydraulic-feed bandsaw machine, HP-36 Hydro-Feed .....	1-15	58
<b>Burg Tool Mfg. Co.</b>			Bridge interlock, overhead, automatic .....	5-1	50	<b>Dodge Div., Chrysler Corp.</b>		
Drilling and tapping machines, 6-spindle—Burgmaster No. 2, Model A .....	4-15	70	<b>Cleveland Grinding Machine Co.</b>			Improved military vehicles, the Cable Splicer and Cargo Carrier .....	5-15	56
<b>Burlington Mills, Inc.</b>			Contour grinding machine—Visual-Grind .....	2-15	58	Trucks improved for 1951 .....	2-15	46
Floor carpeting, felt, plastic coated—Burltex 180-634 .....	2-1	72	<b>Coles Cranes, Inc.</b>			<b>Donaldson Co., Inc.</b>		
<b>Cadillac Motor Car Co., Div. General Motors Corp.</b>			Cranes, with clutch eliminated .....	5-1	52	Measuring and recording muffler efficiency .....	5-15	52
How company is equipping plant to build Walker Bulldog tanks .....	6-1	42	<b>Columbia Machinery &amp; Eng. Corp.</b>			<b>Douglas Aircraft Co., Inc.</b>		
Making the front bumper and guard assembly for 1951 cars .....	4-1	47	Power squaring shears, improved new series .....	2-15	62	How aircraft design changes can be controlled .....	1-1	38
<b>Carboley Co., Inc.</b>			<b>Computer Corp. of America</b>			Production planning boosts department efficiencies .....	4-1	46
Drilling cast iron with carbide tipped tools .....	6-15	98	Computer, Integro-Differential Analyzer ("Ida") .....	6-15	70	Rule for computing aircraft data—"Sky Rule" .....	6-1	62
Metal, heavy, non-cutting—Hevimet .....	2-15	92	<b>Consolidated Eng. Corp.</b>			<b>Dualoc Drive, Inc.</b>		
<b>Carborundum Co., The</b>			Oscillograph, recording type 5-116 .....	1-15	74	Differential, power-dividing type—Dualoc Drive .....	3-1	52
Abrasive belt contact wheel—"61" .....	5-15	62	<b>Consolidated Vultee Aircraft Corp.</b>			<b>Du Pont, E. I., de Nemours &amp; Co., Inc.</b>		
<b>Caterpillar Tractor Co.</b>			Flight experience with turbine propeller powered aircraft .....	5-15	106	New process for production of tetraethyl lead .....	6-1	52
Boron treated steels prove efficient in use .....	5-1	98	New Convair-Liner 340 transport .....	4-1	53	<b>E</b>		
Series 2 oils pay their way in Diesels .....	2-1	92	<b>Coss Corp.</b>			<b>Eastman Kodak Co.</b>		
Two new Diesels, D337 & D326, design details .....	6-1	40	Grinder, universal thread and worm type—Reishauer Type NRK .....	3-15	246	Contour projector—Model 3 .....	4-15	58
<b>Century Coating Co.</b>			<b>Crane Packing Co.</b>			<b>Eclipse Machine Div., Bendix Aviation Corp.</b>		
Packaging tape, luminescent .....	4-15	84	Lapping machine, attachments for—roller bar, and pneumatic lifts .....	3-15	248	Fuel pump, electric, automotive .....	2-15	86
<b>Chambersburg Engineering Co.</b>			<b>Cross Co.</b>			<b>Elastic Stop Nut Corp. of America</b>		
Drop hammer—Model "C" Ceco-Drop .....	4-15	60	Drilling machine for cylinder heads .....	5-15	51	Nuts, gang channel and anchor type .....	6-1	64
<b>Chemalloy Associates</b>			Machine for finishing automatic transmission cases .....	1-1	54	<b>Electrical Engineering &amp; Mfg. Corp.</b>		
Alloy, for dry-bearings—"Chemalloy" .....	5-15	88	Machine, special, for clutch housings .....	5-1	60	Pilot control, automatic .....	1-15	90
<b>Chevrolet Motor Div., General Motors Corp.</b>			Machine, special, for cylinder blocks .....	4-1	55	Stabilizer actuator assembly .....	1-15	90
Lashograph—instrument for observing valve lash in a running engine .....	4-1	51	Transmission case special machine .....	3-15	250	<b>Electric Auto-Lite Co.</b>		
<b>Chicago Wheel &amp; Mfg. Co.</b>			<b>Cullman Wheel Co.</b>			Minimum energy loss in ignition systems .....	2-1	93
Grinder hand tool, powered—Hi-Power, Models No. 3500 and 3505 .....	3-1	50	Disk sprocket hubs, interchangeable—Grip-Master .....	1-15	85	<b>Electro Mechanical Devices, Div. George L. Nankarvis Co.</b>		
Grinding wheels, vitrified bond, 79E .....	1-15	82	<b>Curtiss-Wright Corp.</b>			Test stand, hot-cold .....	2-15	136
<b>Chrysler Corp.</b>			Extruded hollow propeller blades .....	4-1	32	<b>Elgin National Watch Co.</b>		
Chrysler's V-8 engine; machining operations—Part I .....	3-1	30	Silencing aircraft engines .....	2-15	40	Abrasive stones, color coded .....	1-1	58
Chrysler's V-8 engine; pistons, rods and crankshafts in production—Part II .....	5-15	46	<b>Cyril Bath Co.</b>			<b>Elmes Engineering Div. American Steel Foundries</b>		
Making new Griflow shock absorbers .....	2-15	38	Contour forming parts for jet engines .....	4-15	45	Press, hydraulic, for drawing and forming with pipeless circuit .....	5-15	72
1951 model offers V-8 engine, power steering and torque converter .....	2-1	43	<b>D</b>			<b>Ellwell-Parker Electric Co.</b>		
Overhead valve V-8 engine develops 180 bhp .....	2-1	38	<b>Dayton-Rogers Mfg. Co.</b>			Trucks, fork lift, electric—Model F-31-T 6000 lb cap. and Model F-26-T 2000 lb cap. .....	5-1	51
Significant operations on the torque converter .....	4-1	38	<b>Deister Machine Co.</b>			Trucks, fork lift, gasoline—Model GF-30-T 4000 lb cap. .....	5-1	51
<b>Cincinnati Milling Machine Co.</b>			Breakdown testing machine .....	6-15	88	<b>English Electric Co., Ltd.</b>		
Milling attachments, circular, manual feed and power feed, 12-in. .....	4-1	58	<b>Delco-Remy Div. General Motors Corp.</b>			Canberra twin-jet bomber, to be built by three nations .....	4-1	44
Milling machine reverse image attachment .....	6-1	54	Ignition problems in damp weather .....	2-1	92	<b>Equipment Mfg. Inc.</b>		
<b>Cincinnati Shaper Co.</b>			Swaged generator pole shoes conserve copper wire .....	1-1	40	Dolly racks, high-stack, cast-tered .....	2-15	86
Squaring shears—20 ft. long, 1/2-in. .....	4-1	56	What makes the Reo Eager Beaver waterproof .....	2-1	45	<b>Ethyl Corp.</b>		
			<b>Denison Engin. Co.</b>			Electronic particle counter for engine combustion studies .....	6-1	52
			Valves, surge damping .....	6-15	87	<b>F</b>		
			<b>De Soto Motor Corp. Div. General Motors Corp.</b>			<b>Fab-Weld Corp.</b>		
			1951 model featuring larger, more powerful engine .....	2-1	44	Racks, pallet and skid type .....	5-1	48
			<b>Detroit-Gear Div. Borg-Warner Corp.</b>			<b>Fairbanks Co.</b>		
			Designing planetary gears for automatic transmissions .....	3-1	26	Casters, swivel and rigid, pressed steel—Series 21, 31, 33 .....	5-1	50

Farnham Eng. & Mfg. Co.	Issue	Page	General Motors Corp., Ternstedt Div.	Issue	Page	Houghton, E. F. & Co.	Issue	Page
Communication system operates on FM carrier current, Trolleyphone system .....	1-1	102	Improved finishing machine for zinc base die castings, the Gryo-finisher .....	5-1	58	Grease, cold-milled, multi-purpose—Comolube .....	1-1	56
Farnham Mfg. Div. Dissner, Rapp Co., Inc. ....	51	68	New methods reduce costs of polishing die castings .....	1-1	49	Hufco Industries		
Milling machine, precision .....			GMC Truck & Coach Div., General Motors Corp. ....	1-1	46	Relay, dynamically balanced, sub-miniature .....	3-1	54
Farval Corp., The			New 1951 light duty trucks ...			Hufford Machine Works		
Spray valve for open bearing surfaces .....	1-15	62	General Petroleum Corp.			Planishing machine .....	3-1	54
Fauver, J. N., Co., Inc.			Engineering analysis of 1951 Mobilgas Economy Run for 1951 has longer course .....	2-15	56	Shrink finishing machine .....	3-1	54
Lubrication device, portable—LubriKit .....	3-1	50	Gerrard, A. J., & Co.			Hydraulic Press Mfg. Co.		
Lubricator, for conveyor, automatic 12-point .....	4-15	62	Strapping equipment—Steel binder and Bulkblinder .....	5-1	49	Hydraulic press, for auto parts	4-1	58
Oil measuring dispenser .....	6-1	56	Strapping, for parcels, non-metallic—Fiber-Strap .....	6-15	90	Molding machine, plastics injection .....	2-15	62
Federal-Mogul Corp.			Giddings & Lewis Machine Tool Co.			Plastics injection molding machine .....	2-1	58
Modified standard carbide tool does intricate form-turning job .....	3-15	224	Aircraft skin Hypro milling machine—type 100 .....	6-15	64	Hydro-Aire Corp.		
Federal Products Corp.			Boring, drilling and milling machine—single-spindle, horizontal .....	4-1	60	Actuator, electro-mechanical—linear type .....	2-1	68
Air gauge, dimensional—Dimensionair .....	2-1	64	Combination planer and miller machine .....	3-1	49	I		
Fine Organics, Inc.			Globe Hoist Co.			Ingersoll Milling Machine Co.		
Solvent, rapid dry, safety type. ....	1-15	90	Dock leveling ramp—hydraulic "self-leveling" .....	5-1	49	Vise, for holding milling cutters .....	4-1	68
Firestone Tire & Rubber Co.			Goodrich, R. F., Co.			Inland Wire Products Co.		
Tire tube, butyl .....	3-1	53	Tire, dimple tread .....	5-15	90	Wire-tyer, Model D, plus special coil cartonn .....	5-1	49
Tire, tubeless, puncture-proof..	2-15	96	Goodrich, R. F., Chemical Co.			International Harvester Co.		
Fisher Body Div. General Motors Corp.			Resin, rigid plastic, polyvinyl..	5-1	66	New military trucks—the M-41 and M-51 .....	3-1	87
Designing to expedite handling of body units .....	5-1	47	Goodyear Aircraft Corp.			International Nickel Co., Inc.		
Simplified body design reduces soldering joints .....	6-1	48	High energy multiple spark ignition systems for jets .....	2-1	35	Two new gear materials .....	1-1	42
Flexmir Products, Inc.			Gevro-Nelson Co.			Ipsen Industries, Inc.		
Mirror, non-glass, unbreakable .....	2-15	88	Driller and countersinker, automatic .....	1-15	58	Furnace, controlled atmosphere .....	4-1	56
Ford Motor Co.			Guaranty Trust Co. of N. Y.			Ironbound Box & Lumber Co.		
Conveyorized testing of generator regulators .....	5-1	40	Business Pulse, The .....	4-15	50	Box and skid top tiering units .....	5-1	53
Machining and hardening in the same setup .....	1-15	50	Business Pulse, The .....	5-15	54	Pallet box, tiering type .....	5-1	50
Mechanization at foundry .....	5-1	37	Business Pulse, The .....	6-15	54	J		
Strain-gage method of determining the running lash of L-head and overhead-valve engines (abstract) .....	4-1	92	H			Janke & Co., Inc.		
Two new inspection devices .....	3-1	44	Hamilton Standard Div., United Aircraft Corp.			Silencing aircraft engines .....	2-15	40
G			Air-conditioning unit for jet cockpits .....	3-1	54	Jensen Specialties, Inc.		
Gardner Machine Co.			Hanna Engineering Works			Industrial oven heater panels ..	2-1	58
Grinding machine, double disk—Model 2V-18 .....	2-15	72	Valves, for speed control—"Flo-Set" .....	1-15	74	Johnson, Eric S., Co.		
Gemmer Mfg. Co.			Hannifin Corp.			Drill chuck, self-centering—Gronkvist .....	3-1	50
New power steering gear, the Hydraguide .....	2-1	50	Presses, hydraulic, small—5 and 8-ton—F-50A and F-50 .....	5-15	78	K		
General Electric Co.			Harley-Davidson Motor Co.			Kellogg Div., American Brake Shoe Co.		
Cable, low-tension, improved—Cleaning tissue, for goggles and glasses lenses—"Magic Lens Tissue" .....	5-15	69	Rapid riveting cuts costs in half .....	1-15	46	Steam spray gun for paint—S-100 .....	1-15	64
Electrode, tungsten—Hi-Thoria High frequency ignition needs no breaker points .....	1-1	34	Hart Mfg. Co., The			Klans Machine & Mfg. Co.		
Relay, reclosing, type ACR .....	6-1	68	Relay, miniature, hermetically sealed—"Diamond H" .....	1-15	52	Clutch plate assembly machine .....	6-15	62
General Electric Co., Aircraft Gas Turbine Div.			Hauser Machine Tool Corp.			Kold-Hold Mfg. Co.		
Turbosuperchargers in commercial aviation (abstract) .....	5-15	39	Measuring machine, precision—Type P234 .....	3-1	51	Plate-coils for industrial heating—Style 90 .....	1-1	56
General Electric Co., Chemical Dept.			Pivot polishing machine—Type 241 .....	4-15	72	L		
Bonding agent, rubber-to-metal .....	5-15	87	Heckethorn Mfg. & Supply Co.			Landis & Gyr, Inc.		
General Electric X-Ray Corp.			Shock absorber, hydraulic, French—Columbus Luxury-Ride .....	1-1	60	Ball bearing, sealed—R. F. Series .....	2-1	44
Crystal-electric inspection method—high-speed .....	2-15	78	Hiller Helicopter Co.			Landis Tool Co.		
General Foundries Co.			New Hornet helicopter powered by twin ram jet engines .....	3-1	36	Crank pin grinding machine—Type DH .....	5-1	48
New cleaning method eliminates broken castings .....	3-15	224	Hobbs Transmission, Ltd. (England) .....	2-15	48	Grinder, universal—Type CHW .....	5-1	42
General Motors Corp.			Hoern & Ditta			Grinding machine, hydraulic, for pistons—Type H .....	2-15	66
Le Sabre designed for the future .....	1-1	37	Special machine grinds and polishes ends of valve tappets ..	6-1	53	Lavalette Co. (France)		
To convert Kansas City plant to jet fighter production .....	1-15	35	Hoof Products Co.			Automatic clutch control introduced in France .....	6-1	60
General Motors Corp., Research Laboratories Div.			New governor for wide range of engines .....	1-1	48	Lear, Inc.		
19XX HC engine .....	6-1	46	Hutchkiss, S.A. des Anciens Etablissements (France) ..	3-1	41	Actuator, for canopy; pneumatic, for emergency—Lear-Romec—Model RD-7460A ...	2-15	140
Operational stresses in automobile parts .....	2-1	34	Hough, Frank G., Co.			Air compressor, Model RD-8160-1 USAF Type RD-70/U	2-15	134
General Motors Corp., Rochester Products Div.			Tractor-shovels—"Payloaders"—Models HY, HA and T-12..	5-1	51	Air compressors, oil-free, high-altitude—Model RG-8160 ...	2-1	70
Throttle return check on Powerglide carburetors .....	3-1	40				Leeds & Northrup Co.		



	Issue	Page		Issue	Page		Issue	Page
<b>Lewis-Shepard Products, Inc.</b>			<b>Miner, W. H., Inc.</b>			<b>O</b>		
Truck, roll-handling, specialized	3-1	52	Door fastener, drop-forged, for trucks and trailers—Models No. 2300 and 2350	3-1	53	<b>Oakite Products, Inc.</b>		
<b>Leyland Motors, Ltd. (England)</b>			<b>Minneapolis-Honeywell Regulator Co.</b>			Steam gun, heavy-duty—Model 502	6-15	94
Assembling large chassis in modern British plant	3-1	42	Fuel valve, magnetic, explosion-proof	3-1	54	<b>Cilgear Co., The</b>		
<b>Lincoln Electric Co., The</b>			Function plotter, automatic—Brown Electronik	6-1	66	Press, for assembling cam shaft bushings—15-ton	5-15	51
New automatic hidden arc welding	3-1	35	Temperature recorder—Electronik	4-1	68	<b>Oldsmobile Div., General Motors Corp.</b>		
<b>Livingstone Engineering Co.</b>			<b>Minneapolis-Moline Co.</b>			Super 88 features new body and leaf-type rear suspension	4-1	49
Cleaner, steam jet type	5-15	84	Tractor use of liquefied petroleum gas	2-1	36	<b>Oxy-Catalyst Mfg. Co.</b>		
<b>Lockhead Aircraft Corp.</b>			<b>Minnesota Mining &amp; Mfg. Co.</b>			Exhaust, catalytic, for gas lift trucks—OCM	1-1	56
Development of steel shapes for aircraft components	3-15	204	Masking tape, No. 670	1-15	88	<b>P</b>		
Production development of a jet-tisonable fuel tank	1-15	44	Riveter's tape, No. 775	1-15	88	<b>Pangborn Corp.</b>		
<b>Lodge &amp; Shipley Co.</b>			Sealing tape for cartons—No. 711	5-15	64	Drum cleaning machines, abrasive—Rotoblast—Models ES-400 and ES-382	5-1	60
Chucking lather, right angle—60-in.	1-1	52	<b>Mobilift Corp.</b>			Liquid blasting saves die polishing time	1-15	46
<b>Lord Mfg. Co.</b>			Fork lift truck, high-tiering—"Tier-Master"	2-15	94	<b>Paul Machine Tool &amp; Die Works</b>		
Vibration control mountings in production	2-1	52	Trucks, fork lift, Models E and ER—Tier-Master Lev-R-Matic	5-1	49	Die and clamping head, automatic	4-1	64
<b>Los Angeles Airways, Inc.</b>			<b>Molloy Mfg. Co.</b>			<b>Perfect Circle Corp.</b>		
Passenger helicopter	5-15	108	Stepped diameter parts extruded to close tolerances	2-15	50	People, piston rings, and quality control (abstract)	6-15	126
<b>Lyon-Raymond Corp.</b>			<b>Motch &amp; Merryweather Machy. Co.</b>			The Fastest "500" at Indianapolis Race	6-15	34
Elevating table, hydraulic tilt-top	5-1	53	Milling and center drilling machines	4-15	64	<b>Pesro Products Div., Borg-Warner Corp.</b>		
Trucks, hand pallet type, 2000 lb. cap.	5-1	53	Milling machine, for weight balancing connecting rods	6-15	76	Flexible production setup at new plant	1-1	32
Trucks, tiering and pallet type—SpaceMaker	5-1	53	<b>N</b>			<b>Plaskon Div., Libbey-Owens-Ford Glass Co.</b>		
<b>M</b>			<b>Nash Motors Div., Nash Kelvinator Corp.</b>			Alkyd molding compound—Plaskon Alkyd 422	6-15	150
<b>Magline, Inc.</b>			Gears of exceptional quality—Nash-Henley 1951 sports car	5-15	42	<b>Plymouth Motor Corp. Div., Chrysler Corp.</b>		
Die tongs, magnesium	5-15	80	New plant for making Rambler bodies	2-15	34	'51 cars styling and mechanical improvements	1-15	41
Dockboards, magnesium	5-15	80	<b>Nat'l Advisory Committee for Aeronautics</b>			<b>Pontiac Motor Div., General Motors Corp.</b>		
Trucks, hand type—magnesium	5-15	80	Surging in centrifugal and axial-flow compressors	5-15	105	Special machine grinds and polishes ends of valve tappets	6-1	53
<b>Mable Co. (Germany)</b>			<b>National Aeronautical Corp.</b>			<b>Power Presses, Inc.</b>		
Aluminum cylinders without cast iron liners	2-15	32	Communication and navigation aid—Omnihome VHT-1	6-1	62	Clutch-and-brake unit, friction type	2-15	92
<b>Mail Tool Co.</b>			Model UTR-1	1-15	52	<b>Pratt &amp; Whitney Div., Niles-Bement-Pond Co.</b>		
Die grinder, pneumatic, midsize	6-15	146	Range and broadcast receiver—Narco LFR-1	5-1	68	Contour follower, electronic	1-1	60
Wrench, impact, multi-purpose Model 2EW	2-15	132	<b>National Broach &amp; Machine Co.</b>			Die sinking cutters, ball nose taper	1-15	88
<b>Mallory, P. R. &amp; Co., Inc.</b>			Gear-holding device, semi-automatic	5-15	50	Gage for classifying critical tolerances—Selectronic	1-15	56
Electrode, for resistance welding "Nu-Wrinkle Cap"	6-15	94	<b>National Machinery Co.</b>			Jig borer measuring system—on No. 4E jig borer "Electrolimit"	2-1	58
<b>Market Forge Co.</b>			Tonnage indicator for forging press	5-15	51	Millers, tracer controlled, helix type BG-22, having phenolic bearing surfaces	6-1	86
Truck, freight type, 3-way operating	5-1	106	<b>Niagara Machine &amp; Tool Works</b>			Quill mounting, ball roll type	2-1	66
Truck, with labor saving pump—Load-Lift	5-1	108	Power table, multidrive, for rotary work	2-1	60	<b>Presstite Engineering Co.</b>		
<b>Marvin Machine Products, Inc.</b>			<b>Nichols, W. H., Co.</b>			Sealer washer of fabricated compound—Presstite 169	3-1	52
Vertical mill attachment	2-1	96	Milling attachment, vertical	4-15	64	<b>Prestole Corp.</b>		
<b>Mattison Machine Works</b>			<b>North American Aviation, Inc.</b>			Lock nut, hex, lightweight	5-15	92
Grinder (surface) five head—No. 100C	5-1	62	Changing properties of metals by bombarding with electrons	6-15	41	<b>Prime-Mover Co.</b>		
Grinder, surface, rotary type (Hanchett) No. 24A	1-15	56	<b>Northrop Aircraft, Inc.</b>			Prime mover with platform or bucket—Model 15	6-1	74
Rotary surface grinder	4-1	55	Aircraft handling cuts cut by double duty technique	5-1	44	<b>Production Machine Co.</b>		
Surface grinder, rotary, four spindle—No. 72	6-1	54	Engineering developments in aircraft production	5-15	34	Polishing machine, centerless—type 101	3-15	246
<b>May-Fran Engineering, Inc.</b>			Newest methods of fabricating honeycomb aircraft components	6-15	42	<b>R</b>		
Conveyor, for machine tool chips—the Chip-Tote	5-1	48	<b>Norton Co.</b>			<b>Ready-Power Co., The</b>		
<b>McCulloch Motors Corp.</b>			Bushings, precision, for grinding wheels	3-15	262	Truck (industrial) power units, Diesel-electric	5-1	102
Tandem-rotor helicopter, the MC-4	4-15	48	Grinding unit, automotive piston	2-15	60	<b>Remont Mfg. Co.</b>		
<b>Mead Specialties Co.</b>			Valve grinder, semi-automatic	1-15	98	File holder—the Over-Tang	4-15	74
Timing devices, pneumatic—Meadmatic Model 4, Meadmatic Model 5	3-1	50	<b>Northrop Aircraft, Inc.</b>			<b>Renault, Regie Nationale des Usines (France)</b>		
<b>Michigan Tool Co.</b>			Aircraft handling cuts cut by double duty technique	5-1	44	New Frigate model in production	5-1	57
Gear unloading attachment, automatic	3-1	48	Engineering developments in aircraft production	5-15	34	Variable-rate suspension for French car	6-1	53
Speed reducers—Cone-Drive	1-1	58	Newest methods of fabricating honeycomb aircraft components	6-15	42			
<b>Midland Industrial Finishes Co.</b>			<b>Norton Co.</b>					
Finish, heat-resistant, silicone base—Sicon	3-15	260	Bushings, precision, for grinding wheels	3-15	262			
<b>Miller Motor Co.</b>			Grinding unit, automotive piston	2-15	60			
Cylinder mounting, labor-saving	4-1	67	Valve grinder, semi-automatic	1-15	98			
Cylinders, large diameter—8 in. to 20 in.	2-15	76						
Cylinders, square-design—space-saving	3-1	51						
<b>Milwaukee Foundry Equipment Div., Sps. Inc.</b>								
Core grinders, dual-type—Series 71	1-15	78						

Reo Motors, Inc.		Issue Page		Standard Oil Co. (Ind.)		Issue Page		V		Issue Page	
Controlled atmosphere enclosure for assembly of Gold Crown engines		6-1	32	Role of gasoline in engine development		2-1	86	V & O Press Co.		3-15	264
Heater, for truck cab, fresh-air type—Reo		3-1	51	Stewart-Warner Corp.				Press, segmental notching type			
LPG conversion system for Gold Comet engine		5-15	45	Tachometer, electric, simplified "Standard," "Recorder" and "Vac-Tach" Models		4-1	62	Vauxhall Motors Ltd. (England)			
What makes the Beaver waterproof		2-1	45	Stewart-Warner Corp., Southwind Div.				General Motors Corp.		5-1	38
Republic Aviation Corp.				Latest developments in vehicle heating		1-15	36	Improved handling methods in new plant			
German aircraft manufacturing methods		2-1	36	Studebaker Corp.				Vernon Allsteel Press Co.		2-18	70
Optical airframe tooling, a new assembly technique		4-15	38	Some outstanding operations at V-8 engine plant—Part 2		2-1	46	Vickers, Inc.			
Rigidized Metals Corp.				Sundstrand Machine Tool Co.		3-15	262	Power unit, hydraulic—Series T20, T30 and T60		5-15	50
Metals, rigidized, for door trim		5-15	87	Superdrain Corp.				"Visual" Planning Equipment Co.		1-15	85
Rivett Lathe & Grinder, Inc.				Control system, remote, hydraulic		6-15	78	Plant layout kit, experimental			
Grinder, hydraulic, universal—1024		2-15	58	Talbot Automobile Co. (France)				W			
Turret Lathe, precision—9 in. swing		6-1	54	Six-cyl race engine (drawings)		2-1	49	Ward Leonard Electric Co.			
Robbins & Myers, Inc.				Technical Tape Corp.				Plating unit — Chromaster, Model A-20		2-1	72
Chain hoist, electric—Type J-C		5-1	50	Tapes, sealing types		4-1	64	Waukesha Motor Co.			
Robinson Aviation, Inc.				Testa Mfg. Co.				Diesel engine, 135 hp, six-cyl—Model 135-DK		2-1	62
Mount, cup type, all-metal Met-L-Flex, Series 7002		1-15	52	Optical inspection instrument—"Borescope"		6-1	62	Webb, Jervis B., Co.			
Rockford Drop Forge Co.				Thaw Shovel Co.				Box, knock-down, for materials handling—Hazen		5-1	51
Liquid blasting saves die polishing time		1-15	46	Materials handling "Swing-Stacker"		6-1	72	Trolley, hand push type		6-1	68
Round, David, & Son				Thompson Grinder Co.				Wellington Machine Co.			
Chain hoist, electric—Rocket "51"		5-1	53	Jet aircraft bucket and blade grinder		6-1	62	Truck, for cartons—IBZ		5-1	50
S				Thompson Products, Inc.				Truck, for dies and molds—Rite Hite		5-1	106
Safe Flight Instrument Corp.				Quality control in parts manufacturing (abstract)		6-15	124	Westinghouse Electric Corp.			
Vibrator for instrument panel—Safe Flight		2-15	138	Timken-Detroit Axle Co.				Gear hardening machine, radio-frequency—"Inductall"		1-1	52
Sallisbury Axle Works, Div. Dana Corp.				Rear axle designed for short wheelbase truck tractors		2-1	41	Machine tool bottleneck		5-1	60
Advanced production methods in self-contained axle plant		6-15	38	Timken Roller Bearing Co.				Meters, radioactivity detection type—Universal Roentgen		1-15	62
Schwartz Chemical Co.				Stresses imposed by processing		2-1	33	Motor, A-C, redesigned—Life-Line, type SK		1-15	68
Cleaner, liquid, for acrylics—Rez-N-Kleen		2-15	138	Tinch Products Co.				Motor starter for machines—Motor Watchman, class 10-100-SI		3-1	53
Sciaky Bros., Inc.				Impregnating equipment for porous parts		2-1	60	Quality control eliminates unnecessary operation (abstract)		6-15	122
Welding machine, mash type—PMM-2TL		2-15	68	Tinnerman Products, Inc.				Radio frequency generator—5 kw. for induction heating		5-15	84
Sheffield Corp., The				Fastener for interior trim—"Speed Clip"		2-1	62	Speed reducer, double-reduction type DB		6-1	58
Comparator for surface finish—precisionaire		1-15	94	Fastener, push-on clip type—"Speed Clip"		3-15	258	Spot welding control		3-1	65
Gaging plugs, adjustable		1-1	58	Speed nut, push-on type, self-retaining		4-15	74	White Motor Co.			
Shell Oil Co.				Towmotor Corp.				Mustang Model 250A engine develops 150 hp		4-1	37
Drums, with "necked-in" top		5-1	66	Die handling unloader accessory Fork truck crane arm		5-15	84	Whiting Corp.			
Silent Hoist & Crane Co.				Hydraulic scoop accessory		1-1	56	Trackmobile for freight-car spotting		1-15	67
Truck, fork lift, heavy-duty—Liftruck		5-1	112	Pallet truck, electric—Model W		2-1	62	Wilkening Mfg. Co.			
Simca Automobile Co. (France)				Tuthill Spring Co.				Piston ring, oil-control type—Pedrick Formflex CSS		1-15	42
New Aronde model production started		6-15	46	Lubricant, Inter-leaf, for springs—"Moly Dial"		1-15	68	Wisconsin Motor Corp.			
Simpson Electric Co.				Twin Disc Clutch Co.				Oil filter cartridge—Micro-Fine		4-1	68
Oscilloscope, space saving—Model 476 Microscope		5-1	66	Torsional vibrations minimized in reverse and reduction gears		4-1	48	Wright Hoist Div., American Chain & Cable Co.			
Smitsvank N.V. (Holland)				U				Hoists, electric—Frame B		3-15	282
Low tension ignition system		3-1	47	U. S. Air Force				Wright Speedway		4-15	88
Snyder Tool & Engineering Co.				New concepts for defense tooling		4-15	37	Trolleys, lightweight—Wright-Way			
Connecting rod balancing machine		1-1	54	U. S. Ordnance Corps				Wright-Patterson Air Force Base		2-1	35
Presses, compacting type, for powdered metals—Colton-Haller, models 6-125, 6-100		4-1	60	Materials of military motorized equipment		4-1	50	Starters for turbojet engines			
Transfer machine, five-station		4-1	56	Military tactical wheeled vehicle body requirements		4-1	50	Wysong & Miles Co.			
Sorocy-Vacuum Laboratories				U. S. Rubber Co.				Metal squaring shears		3-1	49
Motor fuel volatility trends		2-1	91	Coating, plastic, air-drying—U. S. Royalguard		4-15	78	Shears for metal squaring		3-1	49
Stallion Mfg. Co.				Sheet, thermoplastic, flame-resistant—Royalite		2-15	134	Y			
Draw collet chuck—Davos		5-15	76	Union Steel Products Co.				Yale & Towne Mfg. Co.			
Stalwart Rubber Co.				Pallet containers, wire mesh—Palletainers		5-15	69	Industrial truck, Diesel, with fluid transmission—"Diesel-Lift"		6-1	88
Rubber compound, Neoprene-based, for aircraft universal joint grease-retainer covers		1-1	62					Scale, platform beam type—Load King		4-1	62
								Telescoping lift device, for lift trucks		4-1	64
								Young Radiator Co.			
								Coolers, for torque converters		6-15	88
								Engine jacket water coolers		6-1	58

